

ID		WBS	Task Name	Contact	Resource Initials	Duration
0			D0 Grid Production Computing Initiative	ahnlein		166 days
1		1	D0 Grid Production Architecture	AL		73 days
2		1.1	INPUT: Original architecture document v1.2	AL	AL	0 days
3		1.2	High-level Architecture Document: draft - APIs, component responsibilities	AL	ASB,AL	7 days
4		1.3	milestone: Draft High-level Architecture Document	AL	AL	0 days
5		1.4	High-level Architecture Document: Review	AL	ASB,RDK,ASB	5 days
6		1.5	High-level Architecture Document: Revised version	AL	AL	8 days
7		1.6	High-level Architecture Document: Approval - ASB	AL	RDK	4 days
8		1.7	High-level Architecture Document: Approval - VW	AL	RDK	1 day
9		1.8	MILE 7: D0 Grid Production Architecture document done	AL		0 days
10		2	Adjust Responsibilities among SamGrid, D0runjob, D0repro, automc tools	GG		156 days
11		2.1	INPUT: Review of D0runjob interface	PM	PM	0 days
12		2.2	Decouple D0runjob macro and SamGrid	GG		4 days
13		2.2.1	INPUT: Interface changes documented	GG	PM	0 days
14		2.2.2	Decouple D0runjob macro and SamGrid development work	GG	PL	1 day
15		2.2.3	Decoupling: MC Job Type: SamGrid Integration	GG	PM	3 days
16		2.3	Ability to store output at any stage on demand	GG		128 days
17		2.3.1	Store output from any stage: SamGrid development/integration	GG	PM	1 day
18		2.3.4	Store output from any stage: Production-level test	GG	JS	1 day
19		2.3.5	MILE 22: Store output from any stage of processing	GG		0 days
20		2.4	Start Prod via SAM Definition from Stage 2 of Prod: v1	GG		30 days
21		2.4.1	INPUT: Start Prod at Stage 2: D0runjob development	GG	PL	0 days
22		2.4.2	Start Prod at Stage 2: SamGrid development/integration	GG	PM	21 days
23		2.4.3	Start Prod at Stage 2: Production-level test	GG	JS	3 days
24		2.4.4	MILE 2: Start (MC) Production at Stage 2 - Working	GG		0 days
25		2.5	Error Recovery in Phased Processing	GG		35 days
26		2.5.1	Error Recovery: SamGrid development/integration	GG	PM	1 day
27		2.5.2	Error Recovery: Production-level test	GG	JS	5 days
28		2.5.3	milestone: Error Recovery in Phased Processing	GG		0 days
29		2.6	D0repro tools adapted to use Sam v7 request system	GG		132 days
30		2.6.1	D0repro tools adaptation: First 50% implementation	DW	DW	40 days
31		2.6.2	D0repro tools adaptation: Next 40% implementation	DW	DW	32 days
32		2.6.3	D0repro tools adaptation: Request impact on SamGrid and/or D0runjob	GG	RDK,GG	4 days
33		2.6.8	D0repro tools adaptation: Fix python interface to SAM request system	AL	SS	12 days
34		2.6.9	D0repro tools adaptation: Final 10% implementation	DW	DW	9 days
35		2.6.4	D0repro tools adaptation: Use generic runjob interfaces in Samgrid for data processing App	GG	PM	14 days
36		2.6.10	D0repro tools adaptation: Define test dataset	GG	MD	1 day
37		2.6.5	D0repro tools adaptation: Adjust D0runjob to use request system	GG	PL,PM	25 days
38		2.6.11	D0repro tools adaptation: Production test	GG	MD	3 days
39		2.6.6	D0repro tools adaptation: MC Production test	GG	JS	3 days
40		2.6.7	MILE 14: D0repro-tools uses Sam v7 request system	GG		0 days
41		2.7	Resolve how to add production paths in future	GG		13 days

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42		2.7.1	Generalization of Job Types according to I/O Characteristics	GG	PM	7 days
43		2.7.2	Resolve how to add production paths in future: Document	GG	PM	4 days
44		2.7.3	Resolve how to add production paths in future: D0 Approval	GG	ASB	2 days
45		2.7.4	MILE 20: How to add production paths in future - resolved	GG		0 days
46	✓	2.8	Support testing v7/d0runjob/SamGrid functionality	GG		82 days
47	✓	2.8.1	Survey current understanding of testing procedures	GG	RDK	6 days
48	✓	2.8.2	D0GPCI FNAL testing meeting	GG		1 day
49	✓	2.8.3	Testing responsibilities, procedures proposal	GG	GG	12 days
50	✓	2.8.4	Agreement on Component and Integration testing	GG	GG,PL	8 days
51	✓	2.8.5	Evaluate how D0runjob should set up WN environment	GG	AB2	4 days
52	✓	2.8.6	D0runjob sets up its own environment	GG	PL	6 days
53	✓	2.8.7	Evaluate and sign-off on test facilities and procedures	GG	/,PL,DW,JS	5 days
54	✓	2.8.8	MILE 18: Support testing v7/d0runjob/SamGrid functionality	GG		0 days
55	📅	2.9	Start Prod via SAM Definition from Stage 2 of Prod: v2	GG		4 days
56		2.9.1	Start Prod at Stage 2: SamGrid notification=all bug fix	GG	PM	2 days
57		2.9.2	Start Prod at Stage 2: Production-level re-test	GG	JS	2 days
58		2.9.3	milestone: Start Prod at Stage 2 Ready for Production Release	GG		0 days
59	📅	2.10	Evaluate Extensions to Development	GG		8 days
60	📅	2.10.1	D0runjob/SamGrid Decoupling: Skim Job Type	GG		0 days
61	📅	2.10.2	D0runjob/SamGrid Decoupling: Reco Job Type	GG		0 days
62	📅	2.10.3	D0runjob/SamGrid Decoupling: Merge Job Type	GG		0 days
63	📅	2.10.4	Start Prod via SAM Definition from Stage 3+ of Prod	GG		0 days
64		2.10.5	Fabric interface no longer dependent on Job Type	GG		0 days
65	📅	2.10.6	All merge code into D0runjob	PL		0 days
66	📅	2.10.7	Write evaluation of extensions to development	GG	GG	8 days
67		2.11	MILE 26: Tools have defined API, testing responsibilities	GG		0 days
68	📅	3	Transition Operations Support from SamGrid Dev to Run2 Ops	GG,AL		161 days
69		3.1	Operations Documentation	AL		148 days
70	✓	3.1.1	Data Queues Doc	AL		67 days
71	✓	3.1.1.1	INPUT: Data Queues Doc: Recent Draft	AL	AB2	0 days
72	✓	3.1.1.2	Data Queues Doc: Feed-back, update	AL	AB3,AB2	5 days
73	✓	3.1.1.3	Data Queues Doc: Approve	AL	AL	5 days
74	✓	3.1.1.4	Data Queues Doc: Integrate into SamGrid Documentation	AL	DZ,AL	1 day
75	✓	3.1.1.5	milestone: Data Queues Doc: Completed	AL		0 days
76	✓	3.1.2	Forwarding Node Installation Doc	AL		68 days
77	✓	3.1.2.1	INPUT: Fwd Node Install Doc: Recent Draft	AL	DZ	0 days
78	✓📅	3.1.2.2	Fwd Node Install Doc: Hardware prep attempt	AL	SS	25 days
79	✓📅	3.1.2.3	Fwd Node Install Doc: Feed-back	AL	SS	5 days
80	✓	3.1.2.4	Fwd Node Install Doc: Integrate Dehong and Steve's documents	AL	DZ,SS	5 days
81	✓	3.1.2.5	Fwd Node Install Doc: Approve	AL	AL	1 day
82	✓	3.1.2.6	Fwd Node Install Doc: Integrate into SamGrid Installation Manual	AL	DZ	2 days
83	✓	3.1.2.7	milestone: Fwd Node Install Doc: Completed	AL		0 days

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84	✓	3.1.3	Integrating SRM Storage with SAM Doc	GG		7 days
85	✓	3.1.3.1	SRM with SAM Doc: Integrate into SamGrid Documentation	GG	AB2	7 days
86	✓	3.1.3.2	milestone: SRM with SAM Doc: Completed	GG		0 days
87	📅	3.1.4	Operations Policies Doc	AL		103 days
88	✓	3.1.4.1	Operations Policies doc: Draft	AL	AL	1 day
89	✓	3.1.4.2	Operations Policies doc: Review	AL	GG,RDK	5 days
90	✓	3.1.4.3	Operations Policies doc: Revised draft	AL	AL	12 days
91	✓	3.1.4.4	Operations Policies doc: Review, agreement	AL		7 days
92	✓	3.1.4.5	Operations Policies doc: Review version v1.0	AL	AL	8 days
93	✓	3.1.4.8	Operations Policies doc: Stakeholder Review	AL	RDK	9 days
94		3.1.4.9	Operations Policies doc: Release version v1.1	AL	AL	5 days
95		3.1.4.6	Operations Policies doc: Approve - CD, D0	AL	ASB,RDK	2 days
96		3.1.4.7	MILE 13: Grid Production Operations Policies doc done	AL		0 days
97		3.1.5	milestone: Operations Documentation completed	AL		0 days
98	✓	3.2	Operations Reduction and Transfer Planning	GG,AL		68 days
99	✓	3.2.1	Current Operations Description	GG		33 days
100	✓	3.2.1.1	INPUT: Write-up of operations issues	GG	GG	0 days
101	✓	3.2.1.2	Current Operations description: draft - level and causes	GG	GG	4 days
102	✓	3.2.1.3	Current Operations description: Review	GG	PM,RDK,AL	5 days
103	✓	3.2.1.4	Current Operations description: Revised version	GG	GG	2 days
104	✓	3.2.1.5	Current Operations description: Approve	GG	ASB	1 day
105	✓	3.2.1.6	milestone: Current Operations description	GG		0 days
106	✓	3.2.2	Future Operations Staffing Doc	AL		13 days
107	✓	3.2.2.1	INPUT: FY08 REX budget determined	RS	RS,AL	0 days
108	✓	3.2.2.2	Future Operations description: draft - acceptable load level and activities	AL	RS,AL	6 days
109	✓	3.2.2.3	Future Operations description: Review	AL	3,RDK,ASB	5 days
110	✓	3.2.2.4	Future Operations description: Approve	AL	ASB	2 days
111	✓	3.2.2.5	milestone: Future Operations description	AL		0 days
112	✓	3.2.3	Operations Reduction Plan: "Road To Operations"	GG		60 days
113	✓	3.2.3.1	INPUT: Operations Reduction plan: Monitoring, Alarms proposal	GG	AB2	0 days
114	✓	3.2.3.2	Operations Reduction plan: Overall draft	GG	GG	16 days
115	✓	3.2.3.3	Operations Reduction plan: Review	GG	SB,RDK,AL	5 days
116	✓	3.2.3.4	Operations Reduction plan: Revised version	GG	GG,AB2	10 days
117	✓	3.2.3.5	MILE 4: Operations Reduction plan: Working plan ready	GG		0 days
118	✓📅	3.2.3.6	Operations Reduction plan: Coordinate w/FEF	GG	GG	10 days
119	✓	3.2.3.7	Operations Reduction plan: Approve - CD, D0	GG	ASB,RDK	2 days
120	✓📅	3.2.3.8	milestone: Operations Reduction plan completed	GG		0 days
121	✓	3.2.4	milestone: Operations Reduction and Transfer Planning completed	GG		0 days
122	✓	3.3	Operations Transfer Execution	GG,AL		95 days
123	✓📅	3.3.1	Operations Transfer: Phase 1 (Checklist)	GG,AL		18 days
124	✓	3.3.1.1	SamGrid Requests to Sam Issue Tracker	GG,AL		2 days
125	✓	3.3.1.1.1	Request SamGrid Users to open tickets	GG,AL	GG	1 day

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126	✓	3.3.1.1.2	Inform Sam shifters about handling SamGrid Requests	GG,AL	AL	1 day
127	✓	3.3.1.1.3	milestone: SamGrid Requests to Sam Issue Tracker	GG,AL		0 days
128	✓	3.3.1.2	SamGrid Operations Checklist	GG		8 days
129	✓	3.3.1.2.1	Write-up checklist	GG	PM	1 day
130	✓	3.3.1.2.2	Review checklist	GG	GG,AL	3 days
131	✓	3.3.1.2.3	Revise checklist	GG	PM	3 days
132	✓	3.3.1.2.4	Checklist training, trial run	GG	PM,AL	0.5 days
133	✓	3.3.1.2.5	Fine-tune checklist per feed-back	GG	PM	0.5 days
134	✓	3.3.1.2.6	milestone: SamGrid Operations Checklist Transferred	GG		0 days
135	✓	3.3.1.3	Adapt Operations Checklist to Ops-oriented Format	AL	AL,GG	9 days
136	✓	3.3.1.3.1	Adapt to Ops-oriented format	AL	AL	5 days
137	✓	3.3.1.3.2	Review, sign-off by GG, AB2	AL	GG,AB2	4 days
138	✓	3.3.1.3.3	milestone: Adapt Operations Checklist to Ops-oriented Format	AL		0 days
139	✓	3.3.1.4	MILE 3: Manual Checklist - Phase 1/4 of Ops Transfer done	GG,AL		0 days
140	✓	3.3.2	Operations Transfer: Phase 2 (Fwd Nodes, Stations)	GG,AL		15 days
141	✓	3.3.2.1	REX Ops co-performs ops tasks with SamGrid Dev (Level of Effort)	GG,AL	DEV,REX	15 days
142	✓	3.3.2.2	Topical Operations Training and Docs as requested by REX ops (Level of Effort)	GG,AL	DEV,REX	15 days
143	✓	3.3.2.3	MILE 5: Fwd Nodes - Phase 2/4 of Ops Transfer done	GG,AL		0 days
144	✓	3.3.3	Operations Transfer: Phase 3 (Durable Locations, Queueing Nodes)	GG,AL		15 days
145	✓	3.3.3.1	REX Ops co-performs ops tasks with SamGrid Dev (Level of Effort)	GG,AL	DEV,REX	15 days
146	✓	3.3.3.2	Topical Operations Training and Docs as requested by REX ops (Level of Effort)	GG,AL	DEV,REX	15 days
147	✓	3.3.3.3	MILE 10: Queuing,Durable Nodes - Phase 3/4 of Ops Transfer done	GG,AL		0 days
148	✓	3.3.4	Operations Transfer: Phase 4 (Jim Client, plus all else)	GG,AL		15 days
149	✓	3.3.4.1	REX Ops co-performs ops tasks with SamGrid Dev (Level of Effort)	GG,AL	DEV,REX	15 days
150	✓	3.3.4.2	Topical Operations Training and Docs as requested by REX ops (Level of Effort)	GG,AL	DEV,REX	15 days
151	✓	3.3.4.3	MILE 21: Jim_Client+ - Phase 4/4 of Ops Transfer done	GG,AL		0 days
152	✓	3.3.5	milestone: Operations Transfer nominally completed	GG,AL		0 days
153	✓	3.4	VDT Version Migration	GG		63 days
154	✓	3.4.1	New VDT: VDT-oriented Testbed setup	GG	PM	8 days
155	✓	3.4.2	New VDT: VDT-oriented Testbed resetup	GG	PM	2 days
156	✓	3.4.3	New VDT: software adaptation and deployment	GG	PM	26 days
157	✓	3.4.5	MILE 9: SamGrid migrated to new VDT version	GG		0 days
158	✓	3.5	Operations Reduction Execution: "Road To Operations"	GG		116 days
159	✓	3.5.1	Reinstall key machines with standard configuration	GG		116 days
160	✓	3.5.1.1	Reach agreement among groups involved (by Sep 14)	GG	GG,AL	8 days
161	✓	3.5.1.2	Reinstall Forwarding Nodes with standard configuration	GG,AL		108 days
162	✓	3.5.1.2.1	Define standard fwd node machine configuration	GG	PM	2 days
163	✓	3.5.1.2.2	Reinstall Forwarding Nodes: Oct 22- Nov 20	GG		106 days
164	✓	3.5.1.2.2.1	Admins procure HW parts for all fwd nodes	GG	FEF	16 days
165	✓	3.5.1.2.2.2	Reinstall Forwarding Node 1 (w/Sam Station)	GG		20 days
166	✓	3.5.1.2.2.2.1	Admins configure candidate fwd node (by Oct 22)	GG	FEF	5 days
167	✓	3.5.1.2.2.2.2	Developers install and test candidate fwd node (by Fri Oct 26)	GG	PM	3 days

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168	✓	3.5.1.2.2.2.4	Adjust current software to use standard location as default	GG	PM	1 day
169	✓	3.5.1.2.2.2.3	Adjust current installation instructions	GG	PM	1 day
170	✓	3.5.1.2.2.2.5	REX ops re-installs on candidate machine	AL	SS	1 day
171	✓	3.5.1.2.2.2.7	Admins and REX ops configure production fwd node	AL	FEF,SS	1 day
172	✓	3.5.1.2.2.2.6	Switch candidate machine and d0srv047 (fwd + station) (Nov 6)	AL	SS	1 day
173	✓	3.5.1.2.2.2.9	Diagnose, resolve, document 32-bit/64-bit compatibility issues	GG,AL	PM,SS	4 days
174	✓	3.5.1.2.2.2.8	MILE 11: Forwarding Node w/Sam Station Reinstalled with std config	GG		0 days
175	✓	3.5.1.2.2.3	INPUT: Test of fail-over in production environment	GG	PM	0 days
176	✓	3.5.1.2.2.4	Reinstall Forwarding Node 2	AL		28 days
177	✓	3.5.1.2.2.4.1	REX ops drains and take production fwd node offline (d0srv15): NO-OP	AL	SS	1 day
178	✓	3.5.1.2.2.4.2	REX ops installs software on new production fwd node (samgfw02)	AL	SS	2 days
179	✓	3.5.1.2.2.4.6	REX ops tests new production fwd node (samgfw02)	AL	SS	5 days
180	✓	3.5.1.2.2.4.7	Rex ops and SamGrid Dev resolve perl/VDT issues revealed in fwd node test	AL	SS,PM	8 days
181	✓	3.5.1.2.2.4.8	REX ops retests new production fwd node (samgfw02)	AL	SS	6 days
182	✓	3.5.1.2.2.4.3	Put new fwd node in production, drain old node (samgfw02, old: d0srv15)	AL	SS	1 day
183	✓	3.5.1.2.2.4.5	milestone: verified fwd node configuration and procedure	AL		0 days
184		3.5.1.2.2.5	Reinstall Forwarding Node 3	AL		14 days
185	✓	3.5.1.2.2.5.2	REX ops installs software on new production fwd node (samgfw03)	AL	SS	1 day
186	✓	3.5.1.2.2.5.5	REX ops tests new production fwd node (samgfw03)	AL	SS	2 days
187		3.5.1.2.2.5.7	REX ops follows up on samgfw03 stability concerns with FEF	AL	SS	6 days
188		3.5.1.2.2.5.8	REX ops re-installs software on Fwd Node 3	AL	SS	1 day
189		3.5.1.2.2.5.9	REX ops re-tests Fwd Node 3	AL	SS	1 day
190		3.5.1.2.2.5.3	Put new fwd node in production, drain old node (samgfw03, old: d0srv66)	AL	SS	2 days
191		3.5.1.2.2.5.6	Follow-up observation of samgfw03 after kernel panics	AL	SS	1 day
192		3.5.1.2.2.7	MILE 15: OSG Fwd nodes reinstalled with std config	GG		0 days
193	✓	3.5.1.2.2.8	Organize activities to prepare for LCG fwd node migration	GG	GG	13 days
194		3.5.1.2.2.10	Reinstall LCG/UK Forwarding Node	AL		9 days
195		3.5.1.2.2.10.5	Site ops drains and take production fwd node offline	AL	LCG	5 days
196		3.5.1.2.2.10.6	REX ops installs software on LCG/UK fwd node	AL	SS	1 day
197		3.5.1.2.2.10.7	REX ops puts fwd node back into system	AL	SS	1 day
198		3.5.1.2.2.10.8	Site and REX ops configure production fwd node	AL	SS,LCG	2 days
199		3.5.1.2.2.10.9	milestone: LCG/UK Forwarding Node reinstalled with std config	AL		0 days
200		3.5.1.2.2.11	Reinstall LCG/Germany Forwarding Node	AL		9 days
201		3.5.1.2.2.11.15	Site ops drains and take production fwd node offline	AL	LCG	5 days
202		3.5.1.2.2.11.16	REX ops installs software on LCG/Germany fwd node	AL	SS	1 day
203		3.5.1.2.2.11.17	REX ops puts fwd node back into system	AL	SS	1 day
204		3.5.1.2.2.11.18	Site and REX ops configure production fwd node	AL	SS,LCG	2 days
205		3.5.1.2.2.11.19	milestone: LCG/Germany Forwarding Node reinstalled with std config	AL		0 days
206		3.5.1.2.3	milestone: Forwarding nodes reinstalled with standard configuration	GG		0 days
207	✓	3.5.1.3	Reinstall Queuing Node with standard configuration	GG,AL		70 days
208	✓	3.5.1.3.1	Define standard queuing node machine configuration	GG	PM	5 days
209	✓	3.5.1.3.2	Reinstall Queuing Node: Oct 19 - Nov 6	GG		21 days

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210	✓	3.5.1.3.2.1	Admins procure HW parts for samgrid-like node (job queuing, broker, web server)	GG	FEF	12 days
211	✓	3.5.1.3.2.2	Admins configure test instance of samgrid-like node	GG	FGS	2 days
212	✓	3.5.1.3.2.3	Developers install and test samgrid-like node (by Wed Nov 7)	GG	PM	2 days
213	✓	3.5.1.3.2.4	Adjust current installation instructions	GG	PM	1 day
214	✓	3.5.1.3.2.5	Adjust current software to use standard location as default	GG	PM	1 day
215	✓	3.5.1.3.2.6	Admins configure production samgrid-like node	AL	FGS	1 day
216	✓	3.5.1.3.2.7	REX ops installs queuing software on production samgrid-like node	AL	SS	1 day
217	✓	3.5.1.3.2.9	Dev ops installs web server software on production samgrid-like node	AL	PM	1 day
218	✓	3.5.1.3.2.8	REX ops integrates new samgrid-like node into production system	AL		1 day
219	✓	3.5.1.3.2.8.1	Replace samgrid.fnal.gov (Dec 4 downtime, prefer Nov 6 downtime)	AL	SS	1 day
220	✓	3.5.1.3.3	MILE 12: Queuing node reinstalled with std config	GG		0 days
221	✓	3.5.1.3.4	Diagnose job history incompatibility issues and create migration plan	GG	PM,GG	3 days
222	✓	3.5.1.3.11	Prepare for migration from mixed old/new samgrid nodes to new node use only	GG	PM,GG	5 days
223	✓	3.5.1.3.5	Migrate MC Prod from mixed old/new samgrid nodes to new node use only	GG	JS	23 days
224	✓	3.5.1.3.6	Migrate Prod from mixed old/new samgrid nodes to new node use only	GG	MD	7 days
225	✓	3.5.1.3.12	Turn off old samgrid.fnal.gov (samgsrv1) - warn,do,check	GG	GG	6 days
226	✓	3.5.1.3.8	milestone: Migration to exclusive use of new samgrid node completed	GG		0 days
227	✓	3.5.1.4	Reinstall Durable Locations with standard configuration	GG,AL		13 days
228	✓	3.5.1.4.1	Define standard durable location machine configuration	GG	PM	9 days
229	✓	3.5.1.4.2	Reinstall Durable Locations: Nov 9 - Nov 28	GG		4 days
230	✓	3.5.1.4.2.1	MOOT: Admins procure HW parts(?) for test instance of durable location node	GG	FEF	0 days
231	✓	3.5.1.4.2.2	MOOT: Admins configure test instance of durable location node (by Fri Nov 9)	GG	FEF	0 days
232	✓	3.5.1.4.2.3	MOOT: Developers install and test durable location node (by Fri Nov 23)	GG	PM	0 days
233	✓	3.5.1.4.2.4	Durable Locations: Adjust current installation instructions	GG	PM	1 day
234	✓	3.5.1.4.2.5	MOOT: Adjust current software to use standard location as default	GG	PM	0 days
235	✓	3.5.1.4.2.6	MOOT: REX ops re-installs on test machine	AL	SS	0 days
236	✓	3.5.1.4.2.7	REX ops reconfigures existing durable locations	AL		0 days
237	✓	3.5.1.4.2.7.1	MOOT: Stop tmb upload to d0srv063; REX ops reinstalls durable location	AL	SS	0 days
238	✓	3.5.1.4.2.7.2	MOOT: Stop tmb upload to d0srv065; REX ops reinstalls durable location	AL	SS	0 days
239	✓	3.5.1.4.3	MILE 17: Durable Locations reinstalled with std config	GG		0 days
240		3.5.1.5	milestone: Standard configuration defined and key machines reinstalled	GG		0 days
241		3.5.8	Create SamGrid Test Stand	AL		9 days
242		3.5.8.1	REX ops installs software on test fwd node (d0srv15)	AL	SS	1 day
243		3.5.8.2	Admins fix disk on test queue node (old samgrid)	AL	FEF	5 days
244		3.5.8.5	REX ops installs software on test queue node (old samgrid)	AL	SS	1 day
245		3.5.8.6	REX ops installs durable locations test machine	AL	SS	1 day
246		3.5.8.3	Trial use of SamGrid test stand	AL	SS	2 days
247		3.5.8.4	milestone: SamGrid test stand completed	AL		0 days
248		3.5.2	Automate routine maintenance operations	GG		29 days
249		3.5.2.1	Automatic clean up of job queues	GG		29 days
250	✓	3.5.2.1.3	Dev tools to auto-clean up SamGrid job queue in samgrid_util	GG	PM	2 days
251	✓	3.5.2.1.4	Deploy/observe tools for auto-clean up of SamGrid job queue (Fwd Nodes 1,2 re-installed)	GG	PM,SS	4 days

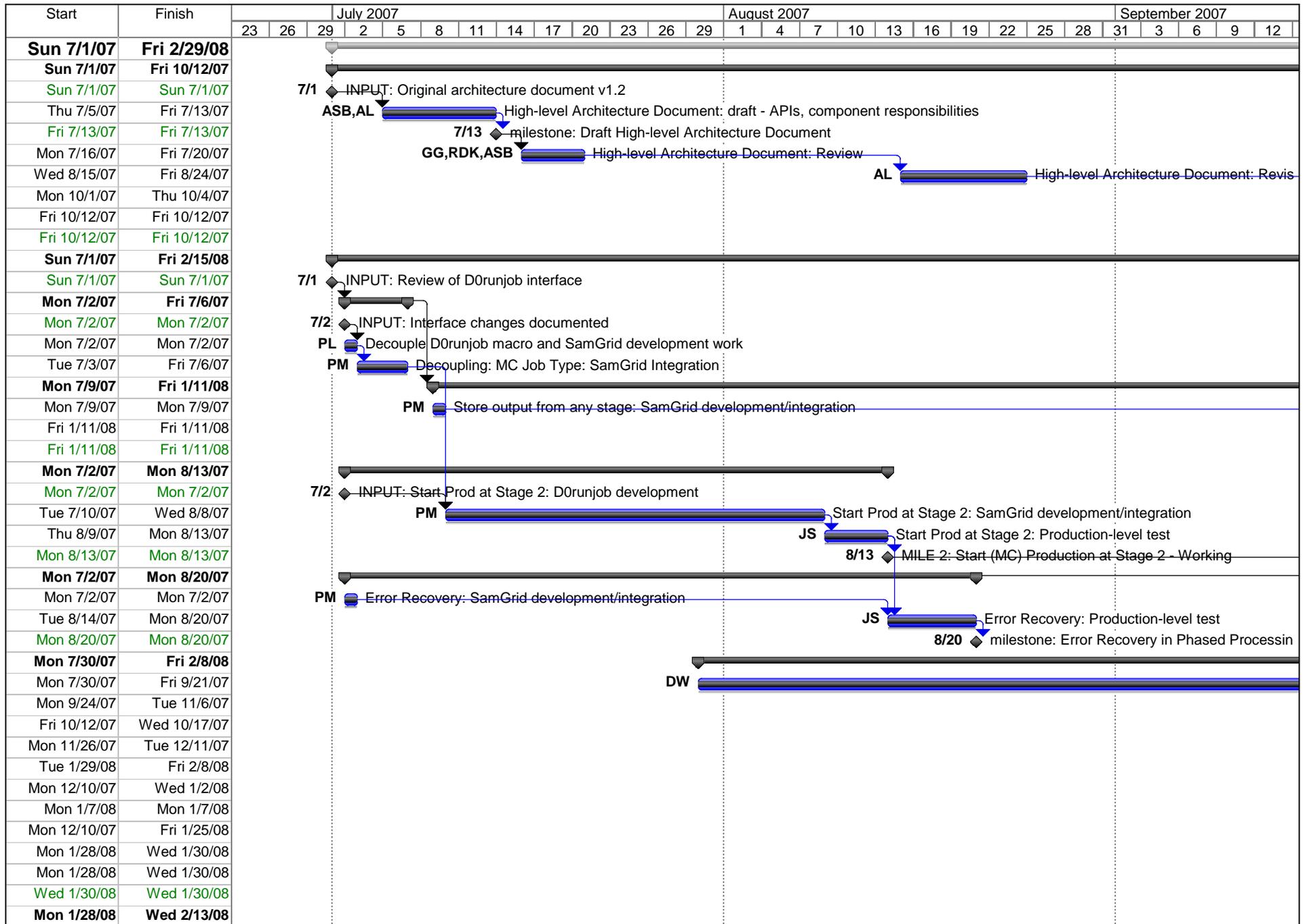
ID		WBS	Task Name	Contact	Resource Initials	Duration
252	✓	3.5.2.1.5	Dev tools to auto-clean up OSG job queue in samgrid_util	GG	PM	2 days
253	✓	3.5.2.1.2	Deploy/observe tools for auto-clean up of OSG job queue (Fwd Nodes 1,2 re-installed)	GG	PM,SS	4 days
254	✓	3.5.2.1.6	Upgrade samgrid_util on Fwd Node 1 to include auto-cleanup changes	GG	SS	2 days
255		3.5.2.1.7	Deploy/observe tools for auto-clean up of SamGrid job queue (Fwd Node 3 re-installed)	GG	PM,SS	4 days
256		3.5.2.1.8	Deploy/observe tools for auto-clean up of OSG job queue (Fwd Node 3 re-installed)	GG	PM,SS	4 days
257		3.5.2.2	Automatic clean-up of disk areas	GG		17 days
258	✓	3.5.2.2.1	Resolve: Globus gatekeeper does not properly cleanup gass caches	GG	PM	1 day
259	✓	3.5.2.2.2	Periodically clean up gram log files at fwd nodes and exec sites	GG	PM	1 day
260	✓	3.5.2.2.3	Clean up sandboxes and jim_tmp areas at fwd node	GG	PM	1 day
261		3.5.2.2.4	Clean up non-rotated log files (eg. Tomcat)	GG	PM	3 days
262		3.5.2.3	Automation of all gridmap file management (including condor_schedd)	GG	PM	3 days
263	✓	3.5.2.4	Simplify maintenance of automatic clean-up scripts for durable locations	GG	AB2	5 days
264	✓	3.5.2.5	Add the deployment of scripts to installation instructions	GG	PM	1 day
265		3.5.2.7	MILE 23: Routine maintenance operations automated	GG		0 days
266		3.5.3	Improve robustness of key services	GG		6 days
267		3.5.3.2	Improve algorithm for selection of OSG resources	GG	PM	6 days
268		3.5.3.3	milestone: Robustness in key services improved	GG		0 days
269	✓	3.5.4	Automatic handling of job log files	GG		94 days
270	✓	3.5.4.1	Reduce size of output sandbox	GG	AB2	1 day
271	✓	3.5.4.2	Make output sandbox space management more robust	GG	AB2	1 day
272	✓	3.5.4.3	Transfer output sandbox selection logic to Runjob: Initial Pass	GG	PL	20 days
273	✓	3.5.4.8	Transfer output sandbox selection logic to Runjob: Test, add old/new support	GG	AB2	8 days
274	✓	3.5.4.10	Transfer output sandbox selection logic to Runjob: Final testing	GG	AB2	10 days
275	✓	3.5.4.11	milestone: Automated handling of job log files	GG		0 days
276	✓	3.5.4.9	Logfile Access Tools			23 days
277	✓	3.5.4.9.1	Specify tools for accessing old logfiles	GG	MD	5 days
278	✓	3.5.4.9.2	Provide tools (to MD) for accessing old logfiles	GG	AB2	6 days
279	✓	3.5.4.9.3	Test logfile access tools	GG	MD	5 days
280	✓	3.5.4.9.4	Revise tools given customer feedback	GG	AB2	2 days
281		3.5.5	Automate system health alarms	GG		90 days
282	✓	3.5.5.1	NGOP central service	GG		66 days
283	✓	3.5.5.1.1	Define hardware	GG	AB2	1 day
284	✓	3.5.5.1.2	Install basic NGOP server	GG	AB2	1 day
285	✓	3.5.5.1.4	Deploy and test best schema as depicted	GG	AB2	1 day
286	✓	3.5.5.1.5	Understand SAM-Grid representation requirements: Dev part	AL	AB2	5 days
287	✓	3.5.5.1.6	Understand SAM-Grid representation requirements: Ops part	AL	RH	5 days
288	✓	3.5.5.1.9	Static NGOP configuration approach (instead of automated)	AL	AB2,REX	8 days
289	✓	3.5.5.1.8	milestone: NGOP central service prepared	GG		0 days
290	✓	3.5.5.2	Samgrid_mon	GG		19 days
291	✓	3.5.5.2.1	Develop persistent environment for repetitive task execution	GG	AB2	10 days
292	✓	3.5.5.2.2	Develop converter between SamGrid config and next-gen cron	GG	AB2	5 days
293	✓	3.5.5.2.4	Store duplicate configuration of fwd node	GG	AB2	1 day

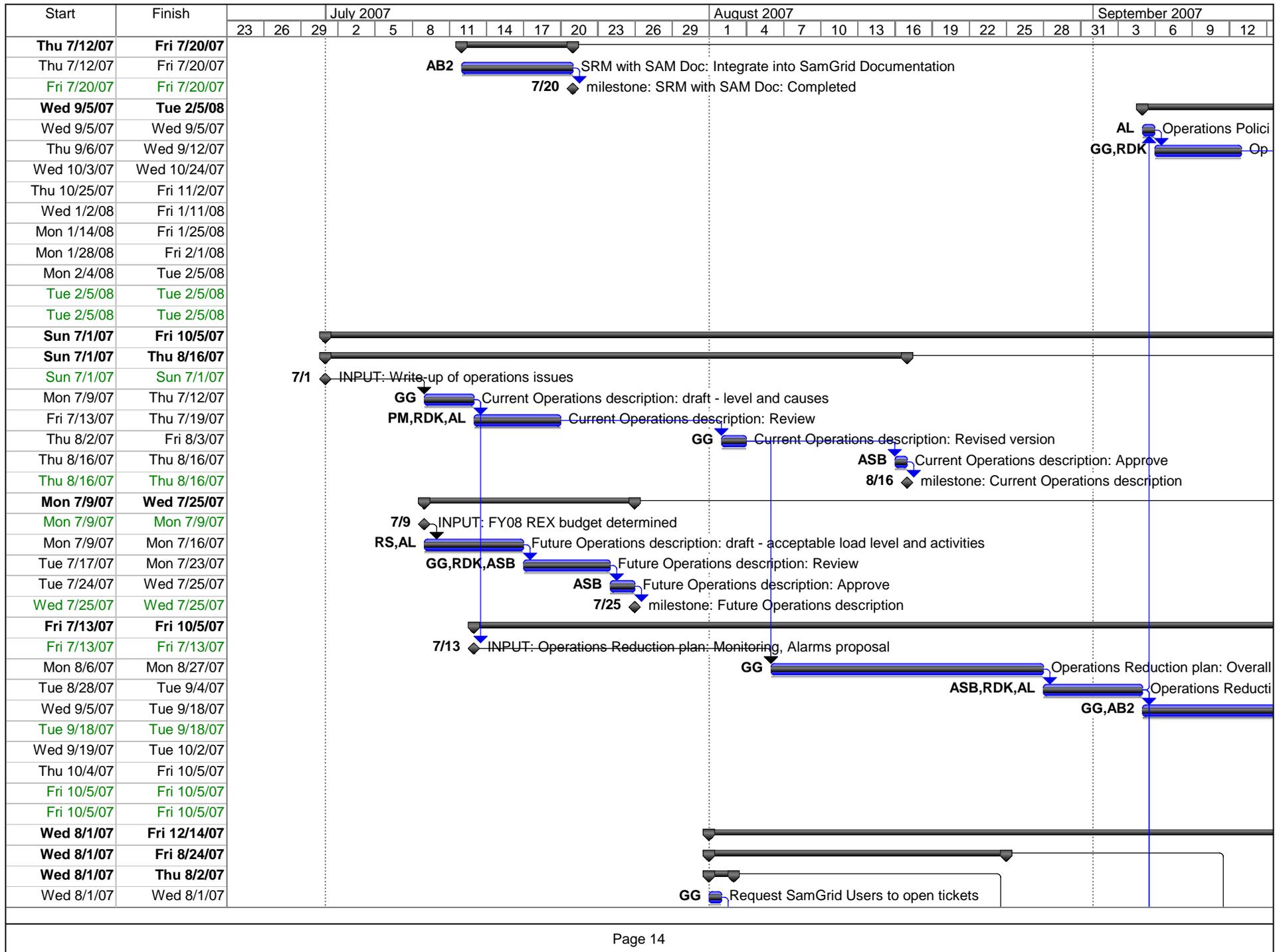
ID		WBS	Task Name	Contact	Resource Initials	Duration
294	✓	3.5.5.2.5	Accept existing configuration of fwd node	GG	AB2	1 day
295	✓	3.5.5.2.6	Dispatch list of monitoring agents periodically, collect statuses	GG	AB2	1 day
296	✓	3.5.5.2.7	Create distributable UPD package	GG	AB2	1 day
297	✓	3.5.5.2.8	milestone: Samgrid_mon developed	GG		0 days
298	✓	3.5.5.3	Develop monitoring scripts	GG		13 days
299	✓	3.5.5.3.1	Develop generic scripts for Gridftp and Fcp monitoring	GG	AB2	1 day
300	✓	3.5.5.3.3	Data Nodes: Stager, Durable location, caches, Gridftp, Fcp	GG	AB2	6 days
301	✓	3.5.5.3.2	Forwarding Node: Gridftp, Fcp, Jim_advertise, XML db, Sandbox, opt. sched. component	GG	AB2	6 days
302	✓	3.5.5.3.4	milestone: Monitoring scripts developed	GG		0 days
303	✓	3.5.5.5	Assess automation of alarming systems	GG	AB2	2 days
304	✓	3.5.5.6	Integration deployment and testing	GG	AB2	4 days
305	✓	3.5.5.7	Documentation Initiation	GG	AB2	5 days
306	✓	3.5.5.4	MILE 19: System health alarms deployed via NGOP with static config	GG		0 days
307	✓	3.5.5.12	Generate NGOP agents from set of monitoring scripts and config	GG	AB2	2 days
308		3.5.5.14	Documentation Completion	GG	AB2	16 days
309		3.5.5.15	Create NGOP config baseline, support process, training	AL	AL,AB2	9 days
310		3.5.5.8	milestone: System health alarms via NGOP with sustainable process	GG		0 days
311	✓	3.5.6	Improve system testing infrastructure	GG		3 days
312	✓	3.5.6.1	Simplify running test jobs	GG		3 days
313	✓	3.5.6.1.1	Create test parameters for all job types	GG	AB2	1 day
314	✓	3.5.6.1.2	Create and distribute JDL templates with test parameters	GG	AB2	1 day
315	✓	3.5.6.1.3	Write testing instructions	GG	AB2	1 day
316	✓	3.5.6.1.4	milestone: Running test jobs simplified per request	GG		0 days
317		3.5.7	milestone: End of the Road to Operations	GG		0 days
318	✓	3.7	Other Operations-related Fixes and Upgrades	GG		108 days
319	✓	3.7.1	Clarify D0 certificate approval process, personnel	GG	GG	5 days
320	✓	3.7.5	Investigate "Immortal Jobs" Operations Issue	GG		0 days
321		3.8	MILE 27: Close-out of Ops Reduction/Transfer completed	GG		0 days
322		4	D0 Primary Production on Fermigrid	MD		156 days
323	✓	4.1	Initial Commissioning	MD		9 days
324	✓	4.1.1	INPUT: Attempt to run D0 Primary Production on FermiGrid	MD	MD	0 days
325	✓	4.1.2	OSG/Fermigrid Resource Selection Meeting	MD	MD	0.5 days
326	✓	4.1.3	Config D0Production role: Fermigrid, GUMS, CAB, PBS, etc.	ST,FEF	MD	6 days
327	✓	4.1.4	Run D0 Primary Prod via D0Production role	MD	MD	1 day
328	✓	4.1.5	MILE 1: D0 Primary Production Runnable on Fermigrid	MD		0 days
329	✓	4.2	D0PPF Commissioning Evaluation Meeting	RDK		1 day
330		4.3	Stable Operations	MD		117 days
331	✓	4.3.1	Commissioning Follow-up	MD		9 days
332	✓	4.3.1.1	Fix d0srv065 storage issues	MD	MD	3 days
333	✓	4.3.1.2	Run D0 Primary Prod to verify storage fix	MD	MD	3 days
334	✓	4.3.1.3	Scale-up D0 Primary Prod to 200 nodes	MD	MD	3 days
335	✓	4.3.1.4	milestone: D0PPF Stable Ops: Commissioning follow-up completed	MD	MD	0 days

ID		WBS	Task Name	Contact	Resource Initials	Duration
336		4.3.2	Management Processes and Documentation	MD		117 days
337		4.3.2.1	Implement Change Management for feature requests using SAM IssueTracker	MD		1 day
338		4.3.2.2	Establish service level for stable operations and implications on system config	MD,GG,PM,JS		5 days
339		4.3.2.3	Grid Production System workflow/dataflow diagram - draft	RDK	RDK	3 days
340		4.3.2.4	Grid Production System info on diagram: node roles, software, maintainers	RDK	RDK,AB2	2.5 days
341		4.3.2.8	Grid Production System workflow/dataflow diagram - final	RDK	RDK	5 days
342	 	4.3.2.5	Open Science Enclave baseline security plan - implications on SamGrid, CAB	MD	MD,GG,FEF	20 days
343		4.3.2.6	Job State diagram with most common error state causes	MD	EXT	5 days
344		4.3.2.7	milestone: D0PPF Stable Ops: Management Processes and Documentation done	MD		0 days
345		4.3.3	System Monitoring	MD		29 days
346	 	4.3.3.1	CAB web monitoring changes requested by MD,JS	RDK	FEF	24 days
347		4.3.3.2	Improve job monitoring, include trend plots	RDK	EXT	5 days
348		4.3.3.3	Augment Job States to be more meaningful to large customer	MD	EXT	5 days
349		4.3.3.4	milestone: D0PPF Stable Ops: System Monitoring done	MD		0 days
350		4.3.4	Specific System Services Issues	MD		65 days
351	 	4.3.4.1	Allow access by MD to dir/files on CAB owned by dzeropro (suggested: get root access)	MD	MD	5 days
352		4.3.4.2	JIM production release consistent with d0runjob v7-7-3 and higher	MD	MD	5 days
353	 	4.3.4.3	Evaluate use of ReSS (more flexible than use of roles)	GG	GG	28 days
354		4.3.4.5	Determine in detail how to adapt to use ReSS in D0GPCI	GG	GG	22 days
355		4.3.4.4	milestone: D0PPF Stable Ops: Specific System Services done	MD		0 days
356		4.3.5	General System Services Issues (Road to Operations)	GG		105 days
357		4.3.5.1	INPUT: (3.5.1) Standardize file system layout on SamGrid nodes	GG		0 days
358		4.3.5.2	INPUT: (3.5.1) Get all nodes governing operation in a consistent, known state	GG		0 days
359		4.3.5.3	INPUT: (3.5.4) Evaluate how to reduce bandwidth consumed by moving logs	GG		0 days
360		4.3.5.4	INPUT: (3.5.4) Make Custom output support smarter, use compression	GG	AB2	0 days
361		4.3.5.5	INPUT: (3.5.4) Migrate Custom output support from SAM wrapper to D0runjob	GG		0 days
362	 	4.3.5.6	INPUT: (3.5.4) Implement a logfile archive node	GG		0 days
363		4.3.5.7	milestone: D0PPF Stable Ops: General System Services done	GG		0 days
364		4.4	D0PPF Operations Evaluation Meeting	RDK		1 day
365		4.7	MILE 28: D0 Primary Production Stable on Fermigrid	MD		0 days
366	 	5	Extend Grid Production System Functionality	GG		83 days
367	 	5.1	Forwarding Node Behind Firewall	GG		5 days
368		5.1.1	Forwarding Node Behind Firewall: Evaluate, determine best course of action	GG	AB2	5 days
369		5.2	Minimal Resource Brokering	GG		20 days
370		5.2.1	Minimal Resource Brokering: Evaluate, determine best course of action	GG	GG	20 days
371		5.3	MILE 16: Grid Production System functionality completed	GG		0 days
372		6	Preparation of D0 Apps for Long-term	ASB		77 days
373		6.1	Skimming	HG		0 days
374		6.1.1	Productize Skimming	RDK		0 days
375		6.2	CAF Trees			0 days
376		6.2.1	Productize CAF Tree generation	RDK		0 days
377		6.3	Raw2Sim			0 days

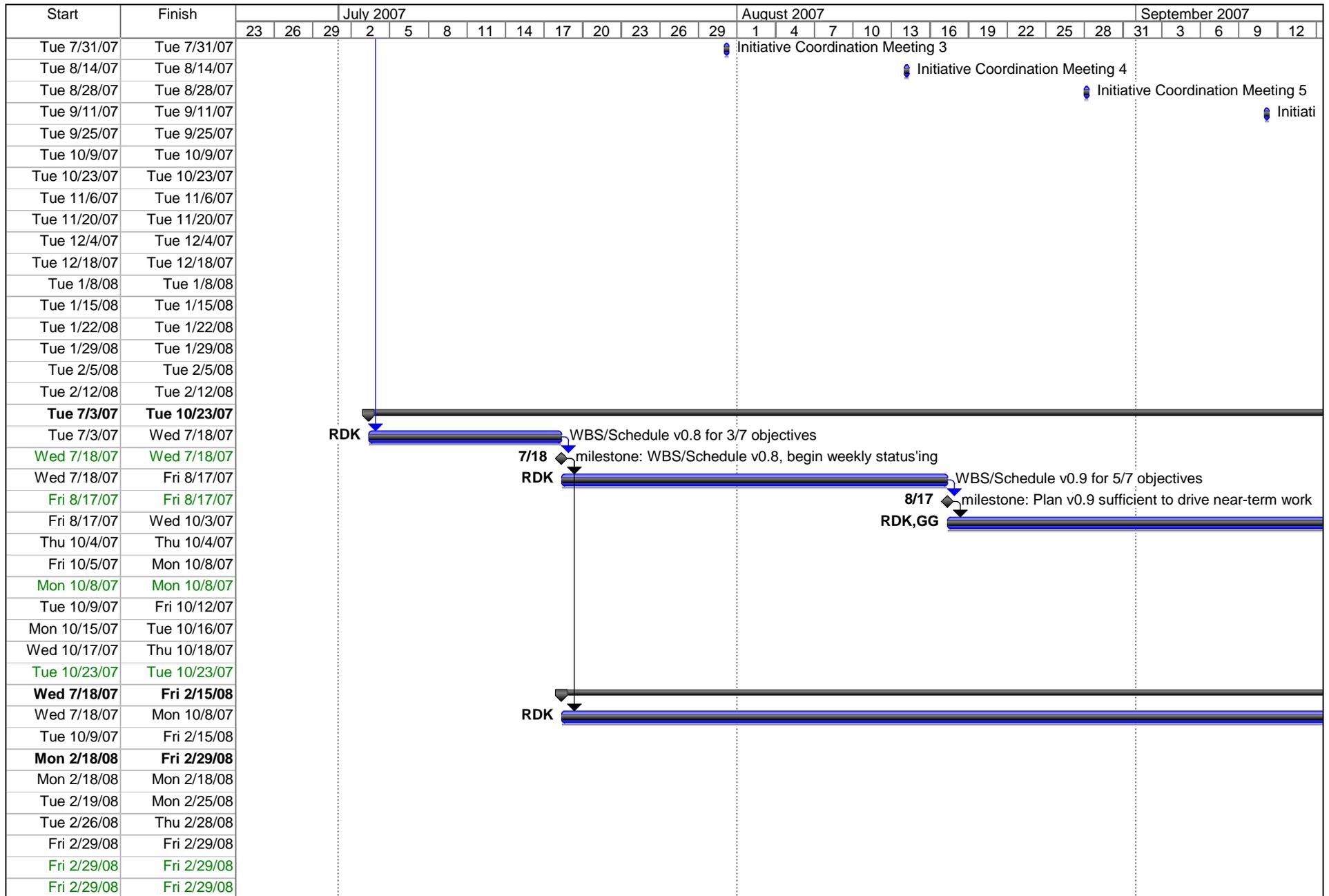
ID		WBS	Task Name	Contact	Resource Initials	Duration
378		6.3.1	Productize Raw2Sim	RDK		0 days
379		6.4	AADST			77 days
380		6.4.1	Productize AADST	RDK		0 days
381		6.4.3	Enable data migration to SAM storage	AL	AL	2 days
382		6.4.4	Track data migration to SAM storage	AL	AL	59 days
383		6.4.5	Perform data migration to SAM storage	AL	D0	64 days
384		6.8	INPUT (7.12.1): Write recommendations for productization of D0 Apps	RDK	RDK	0 days
385		6.5	MILE 24: Preparation of D0 Apps for long-term	ASB		0 days
386		7	Evaluation of D0 SamGrid Requests	RDK		77 days
387		7.1	Reco			0 days
388		7.1.1	EVAL: Ability to merge more than 1 stream from Reco	RDK		0 days
389		7.2	MC Production			0 days
390		7.2.1	EVAL: Ability to run TrigSim in MC Production	RDK		0 days
391		7.3	Skimming			0 days
392		7.3.1	EVAL: Skimming in Production	RDK		0 days
393		7.4	EVAL: Fixing			0 days
394		7.5	Raw2Sim			0 days
395		7.5.1	EVAL: Run raw2sim on minbias files	RDK		0 days
396		7.6	Reco-cert			77 days
397		7.6.1	EVAL: Merging of reco-cert files	RDK		0 days
398		7.6.2	Stand-alone production of reco-cert output on SamGrid			9 days
399		7.6.2.1	Develop WBS for implementing S/A Recocert on SamGrid	RDK	RDK	9 days
400		7.7	CAF Trees			0 days
401		7.7.1	EVAL: CAF Trees from Production	RDK		0 days
402		7.8	EVAL: MC CAF Trees	RDK		0 days
403		7.9	EVAL: AADST	RDK		0 days
404		7.10	EVAL: Grid Analysis	RDK		0 days
405		7.12	Evaluate remaining D0 SamGrid Requests	RDK		77 days
406		7.12.2	Develop generic WBS for adapting D0 Apps to Grid Production	RDK	RDK	9 days
407		7.12.3	Create form to capture D0 App requirements, workflow, use patterns	RDK	RDK	6 days
408		7.12.4	Create maintainable list of known portability issues for D0 Apps on Grid	RDK	RDK	6 days
409		7.12.1	Write evaluation of requests based on generic WBS	RDK	RDK	6 days
410		7.12.5	D0 SamGrid Requests Evaluation: Review	RDK		5 days
411		7.12.8	D0 SamGrid Requests Evaluation: Meet w/D0 Spokes and Vicky White	RDK		0 days
412		7.12.6	D0 SamGrid Requests Evaluation: Revision	RDK	RDK	1 day
413		7.12.7	D0 SamGrid Requests Evaluation: Approval	RDK		1 day
414		7.11	MILE 25: Evaluation of D0 SamGrid Requests done	RDK		0 days
415		8	Project Management	RDK		166 days
416		8.1	INPUT: Draft Preliminary High-level WBS	RDK	RDK	0 days
417		8.2	Initiative Coordination Meeting	RDK		151.13 days
418		8.2.1	Initiative Coordination Meeting 1	RDK		1 hr
419		8.2.2	Initiative Coordination Meeting 2	RDK		1 hr

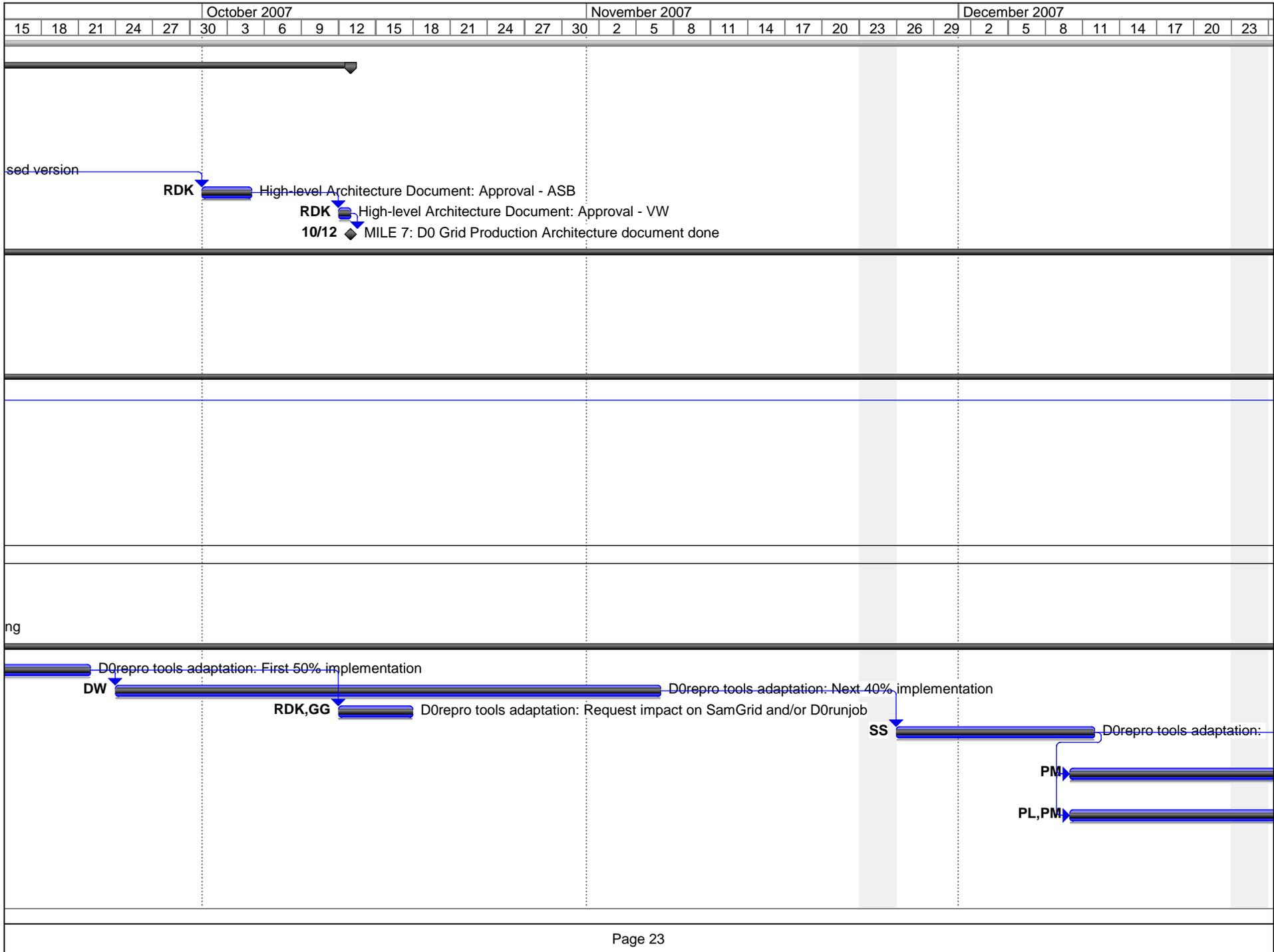
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420	✓	8.2.3	Initiative Coordination Meeting 3	RDK		1 hr
421	✓	8.2.4	Initiative Coordination Meeting 4	RDK		1 hr
422	✓	8.2.5	Initiative Coordination Meeting 5	RDK		1 hr
423	✓	8.2.6	Initiative Coordination Meeting 6	RDK		1 hr
424	✓	8.2.7	Initiative Coordination Meeting 7	RDK		1 hr
425	✓	8.2.8	Initiative Coordination Meeting 8	RDK		1 hr
426	✓	8.2.9	Initiative Coordination Meeting 9	RDK		1 hr
427	✓	8.2.10	Initiative Coordination Meeting 10	RDK		1 hr
428	✓	8.2.11	Initiative Coordination Meeting 11	RDK		1 hr
429	✓	8.2.12	Initiative Coordination Meeting 12	RDK		1 hr
430	✓	8.2.13	Initiative Coordination Meeting 13	RDK		1 hr
431	✓	8.2.16	Initiative Coordination Meeting 14	RDK		1 hr
432	✓	8.2.14	Initiative Coordination Meeting 15	RDK		1 hr
433	✓	8.2.17	Initiative Coordination Meeting 16	RDK		1 hr
434	✓	8.2.15	Initiative Coordination Meeting 17	RDK		1 hr
435	📅	8.2.19	Initiative Coordination Meeting 18	RDK		1 hr
436	📅	8.2.20	Initiative Coordination Meeting 19	RDK		1 hr
437	✓	8.3	Project Planning	RDK		78.9 days
438	✓📅	8.3.1	WBS/Schedule v0.8 for 3/7 objectives	RDK	RDK	10 days
439	✓📅	8.3.2	milestone: WBS/Schedule v0.8, begin weekly status'ing	RDK		0 days
440	✓	8.3.3	WBS/Schedule v0.9 for 5/7 objectives	RDK	RDK	13 days
441	✓📅	8.3.4	milestone: Plan v0.9 sufficient to drive near-term work	RDK		0 days
442	✓	8.3.5	Draft WBS/Schedule v1.0 for 7/7 objectives	RDK	RDK,GG	32 days
443	✓	8.3.6	Big Baseline Planning Meeting	RDK		1 day
444	✓	8.3.7	Create Baseline Project Plan v1.0	RDK	RDK	2 days
445	✓📅	8.3.8	MILE 6: Baseline Project Plan v1.0 released	RDK		0 days
446	✓	8.3.9	Baseline Project Plan: Executive Presentations	RDK	RDK	4 days
447	✓	8.3.12	Baseline Project Plan v1.0: Integrate feed-back	RDK	RDK	2 days
448	✓	8.3.13	Baseline Plan Project v1.1: Drop tasks pushed out past end of Initiative	RDK	RDK	2 days
449	✓📅	8.3.14	MILE 8: Project Plan v1.1	RDK		0 days
450		8.4	Project Administration	RDK		144.9 days
451	✓	8.4.1	Planning Phase (Level of Effort = 5%)	RDK	RDK	48 days
452		8.4.2	Execution Phase (Level of Effort >= 15%)	RDK	RDK	77 days
453		8.5	Project Close-out	RDK		10 days
454	📅📅	8.5.1	Project Close-out Meeting	RDK	RDK	1 day
455		8.5.2	Project Close-out Report	RDK	RDK	5 days
456		8.5.3	Project Close-out Report Approval: ABS, CD	RDK	ASB,RDK	3 days
457		8.5.4	Archive project artifacts	RDK	RDK	1 day
458		8.5.5	milestone: Initiative Closed-out	RDK		0 days
459		9	MILE 29: D0 GPC Initiative completed	ASB		0 days

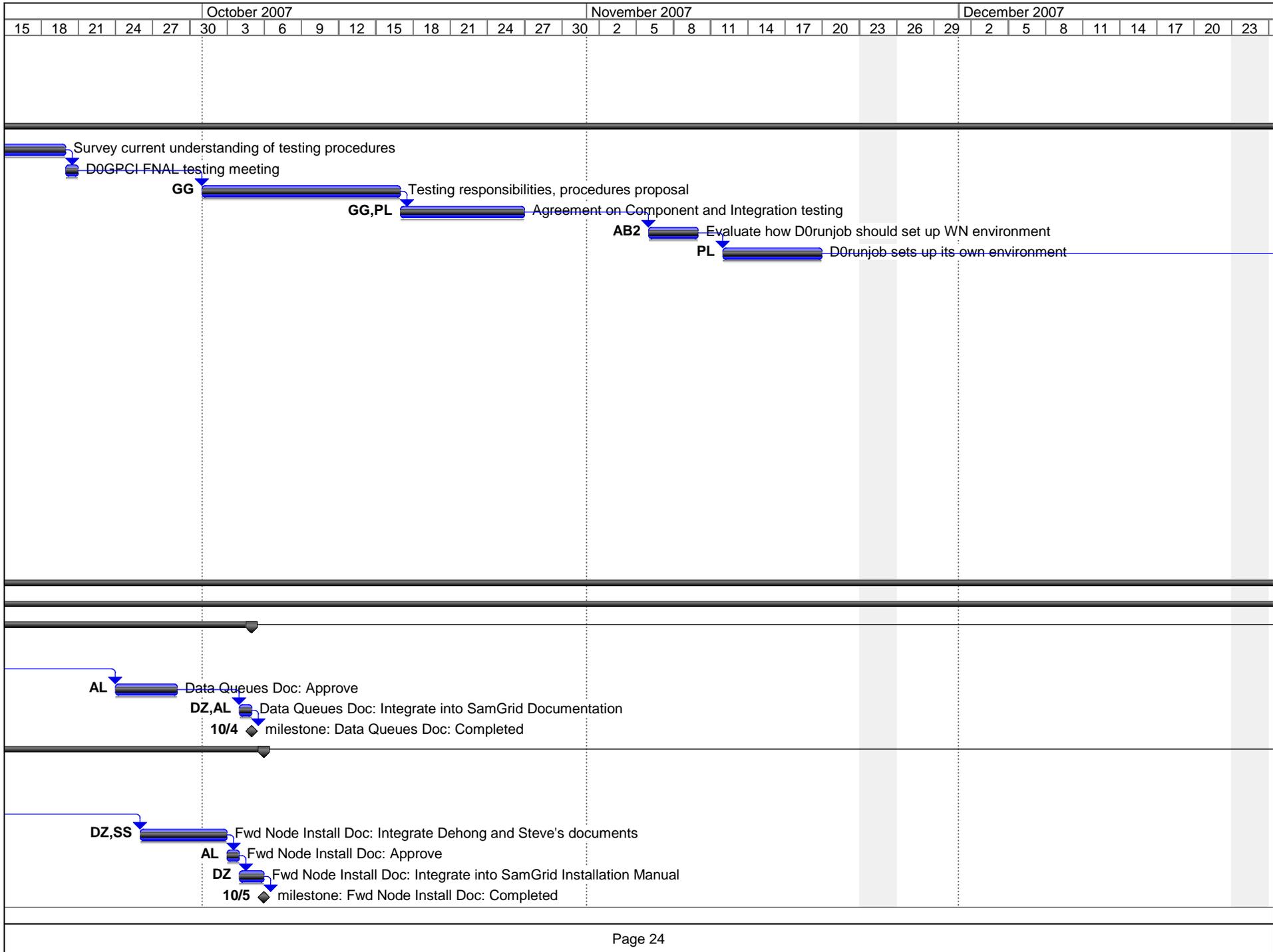


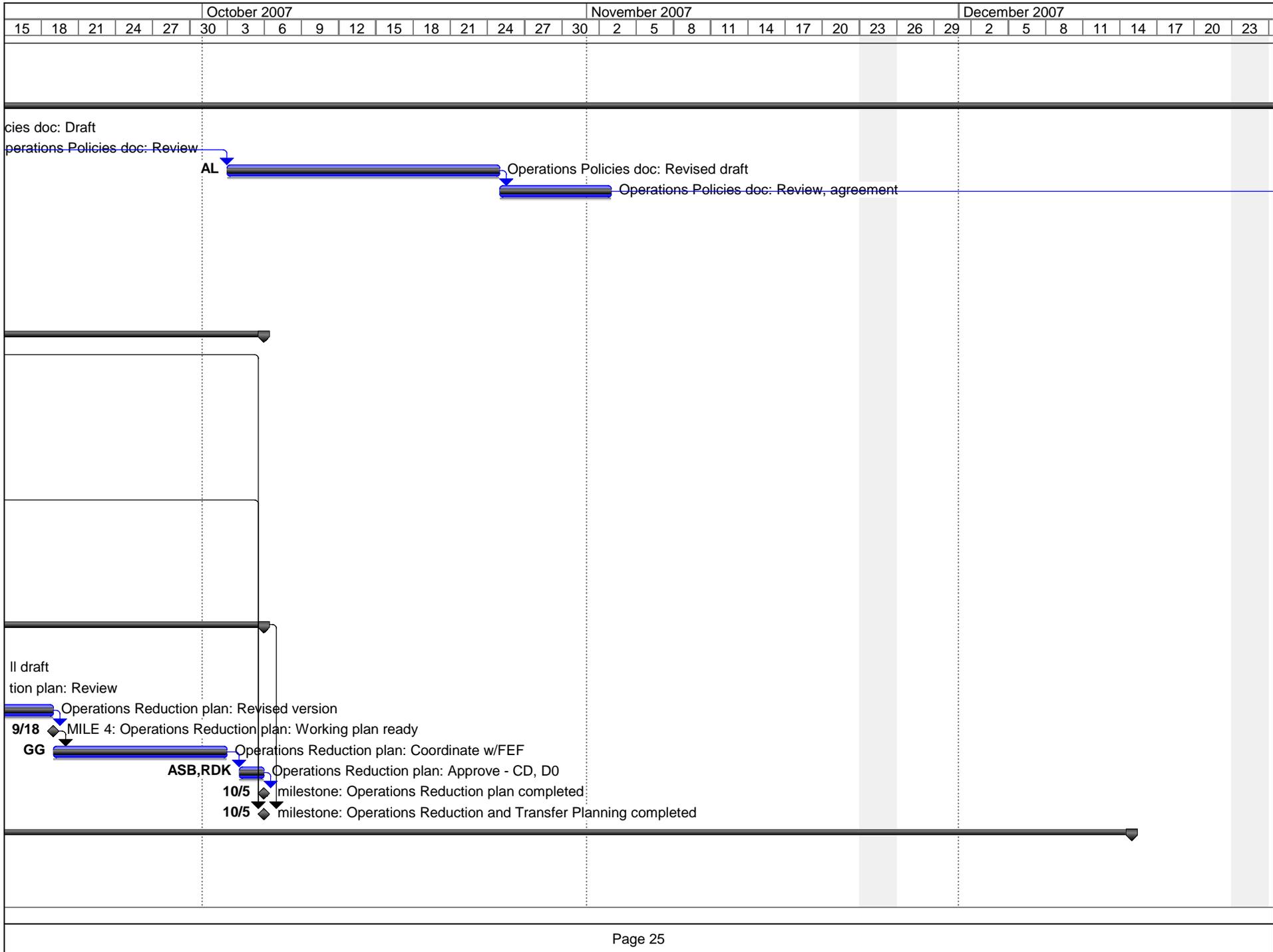


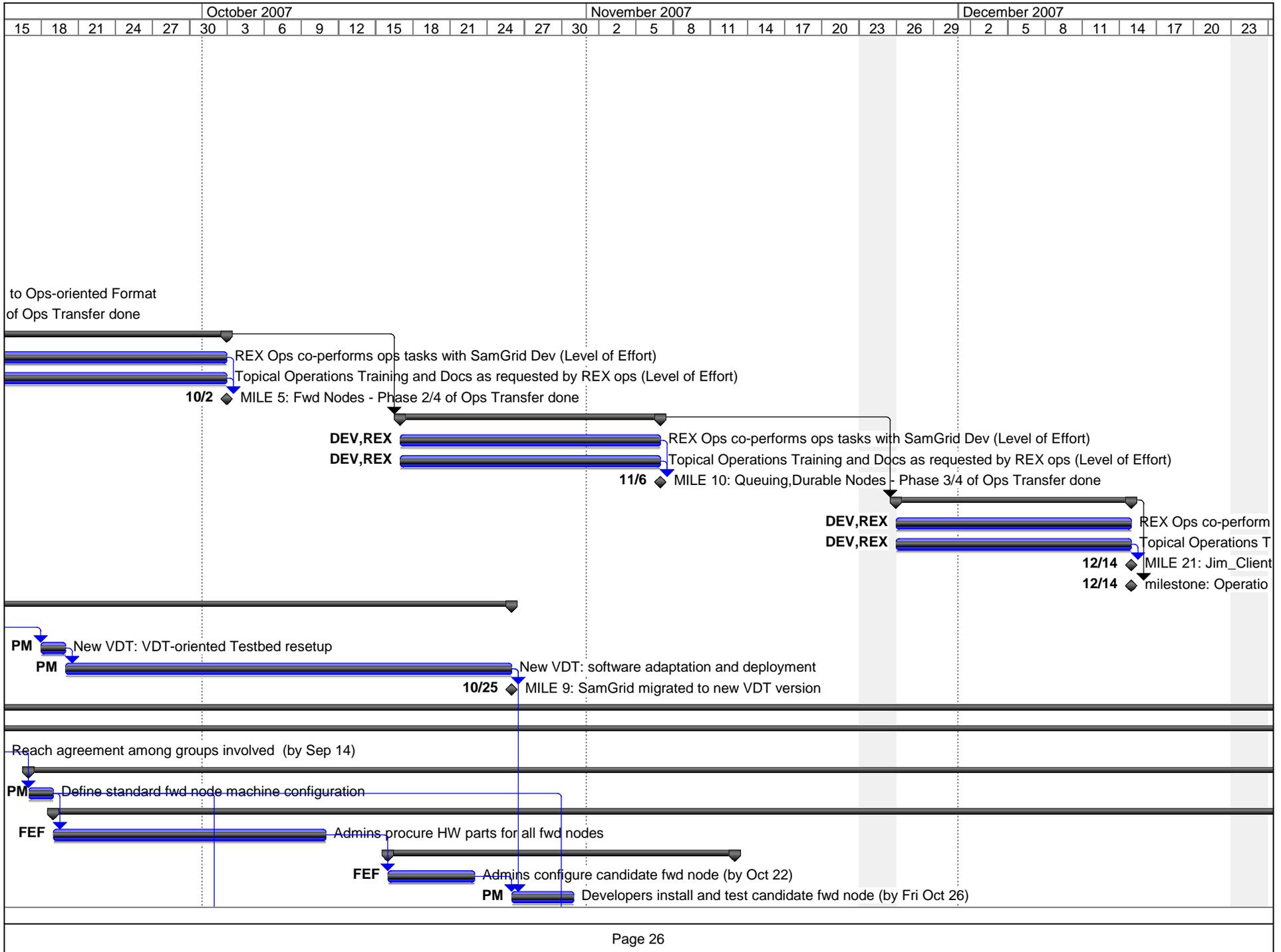
Start	Finish	July 2007														August 2007												September 2007				
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Fri 2/15/08	Fri 2/15/08																															
Sun 7/1/07	Fri 2/29/08																															
Sun 7/1/07	Sun 7/1/07																															
Tue 7/3/07	Tue 2/12/08																															
Tue 7/3/07	Tue 7/3/07																															
Tue 7/17/07	Tue 7/17/07																															

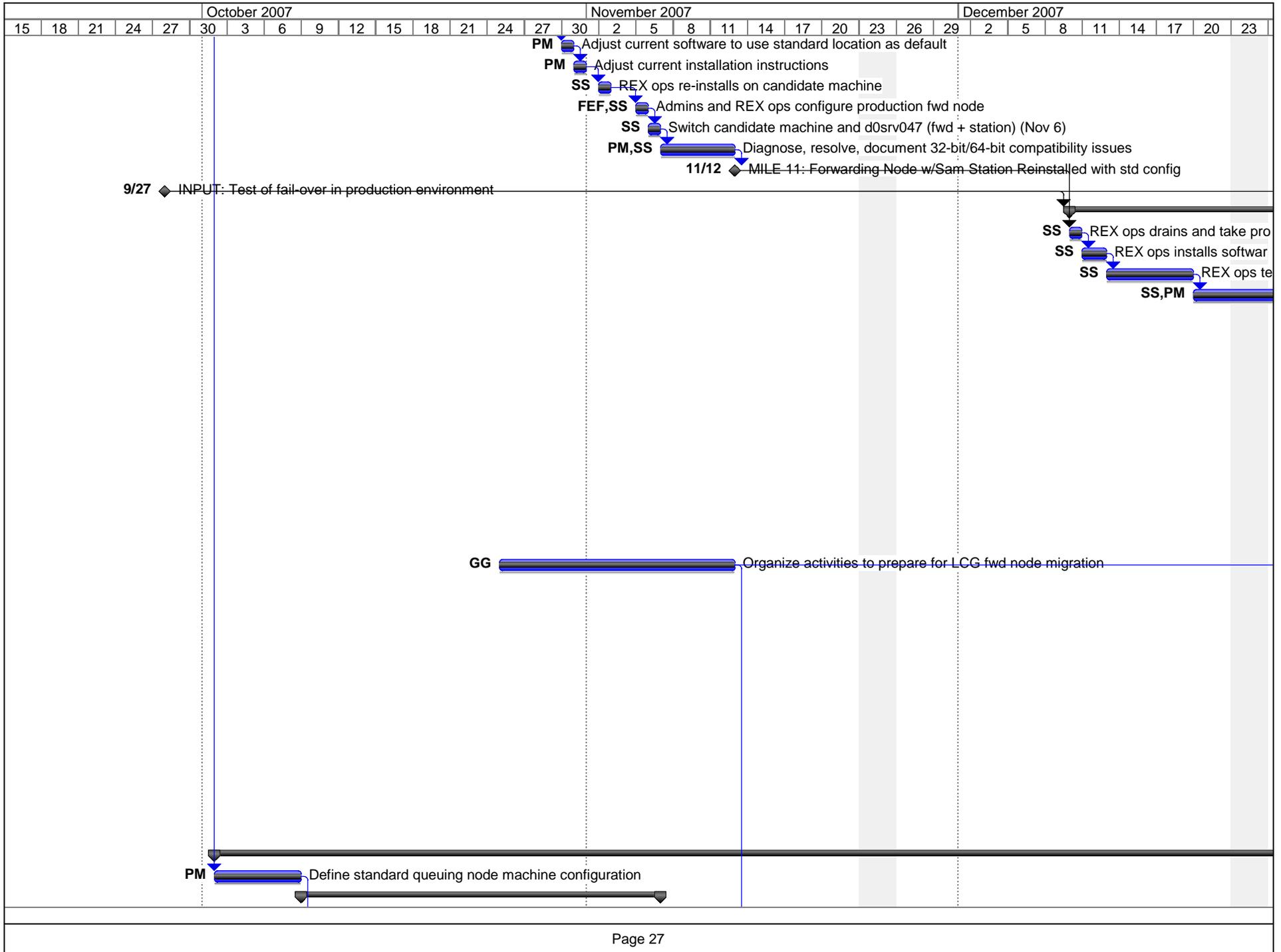


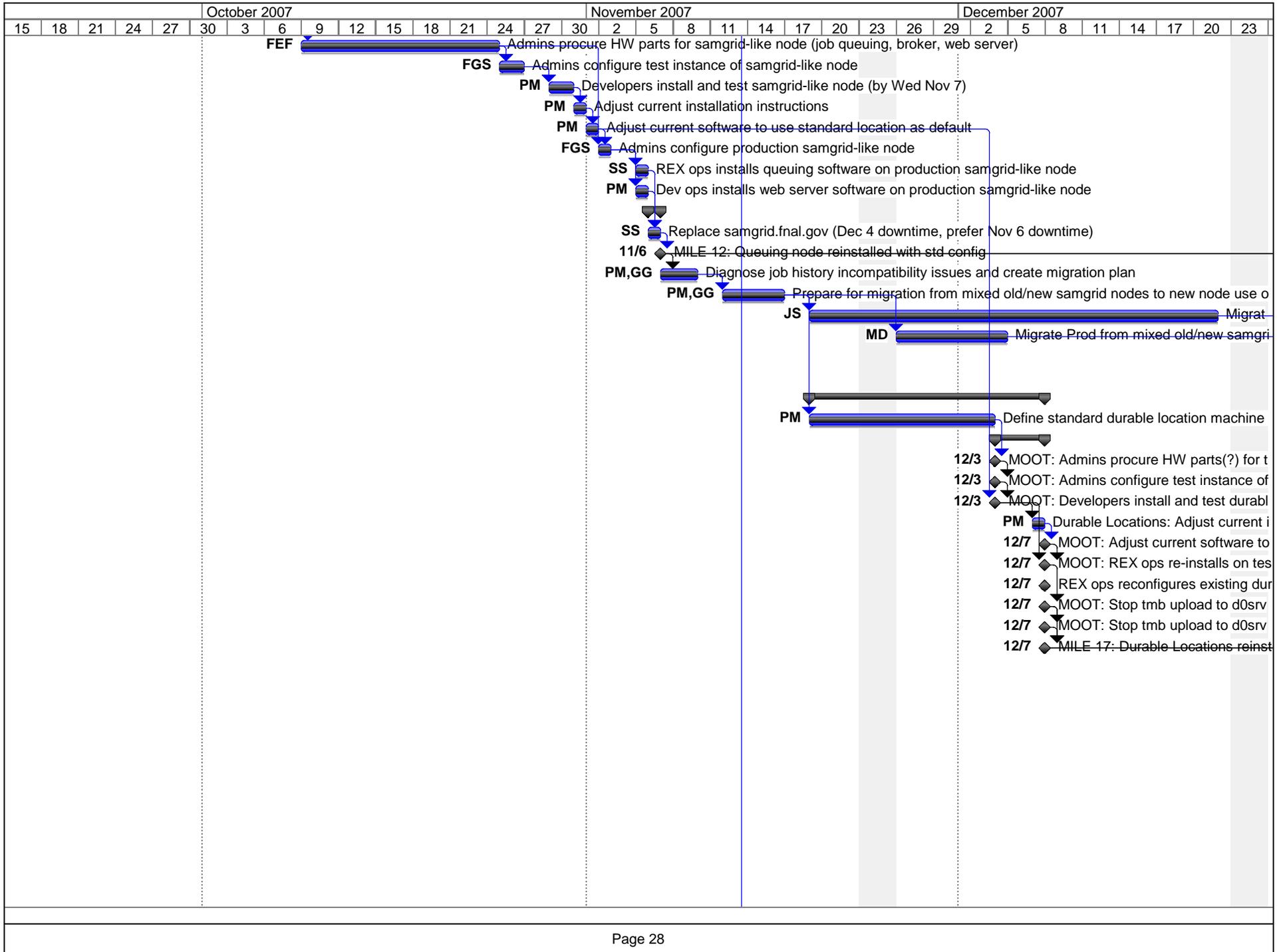


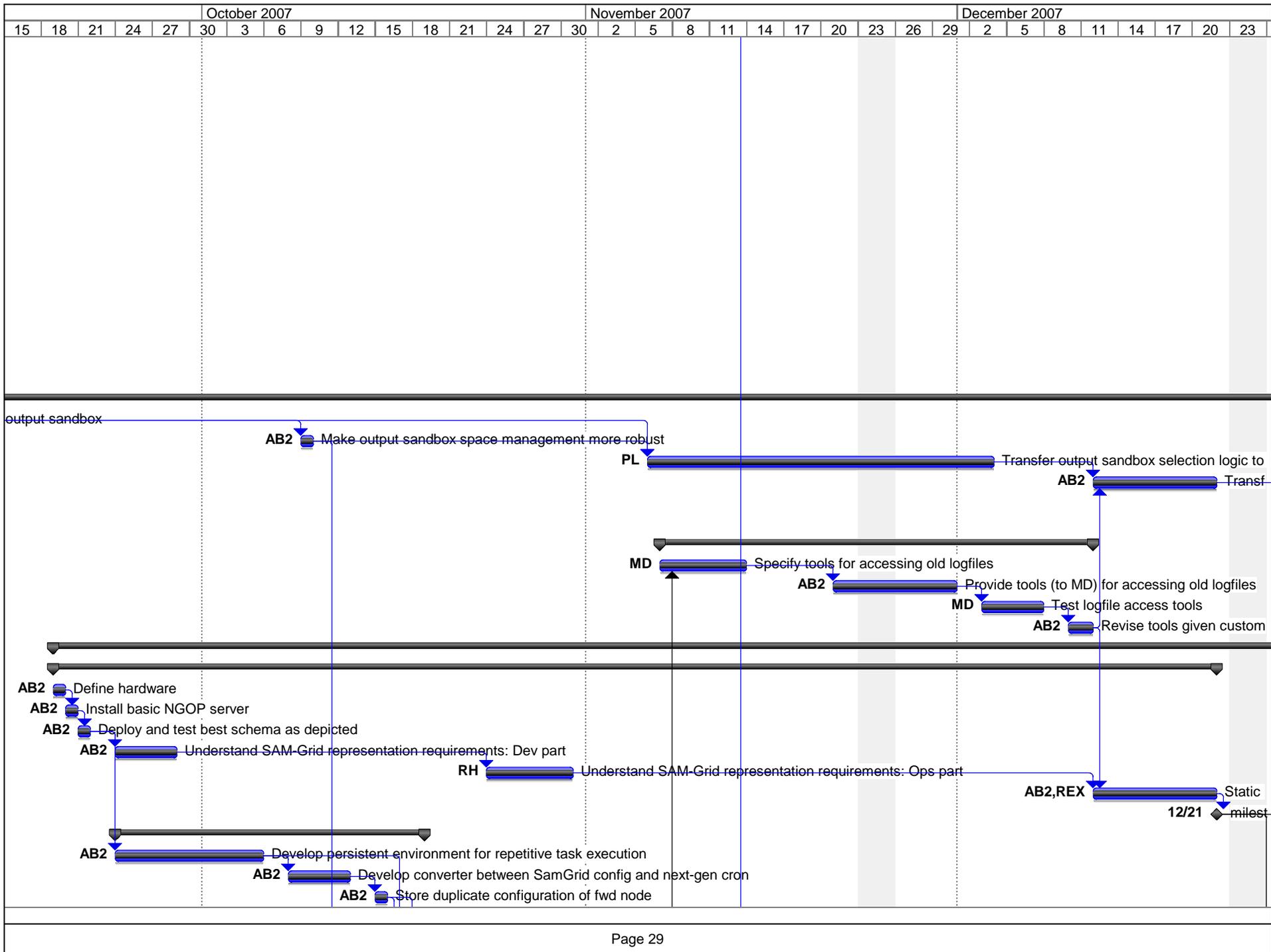


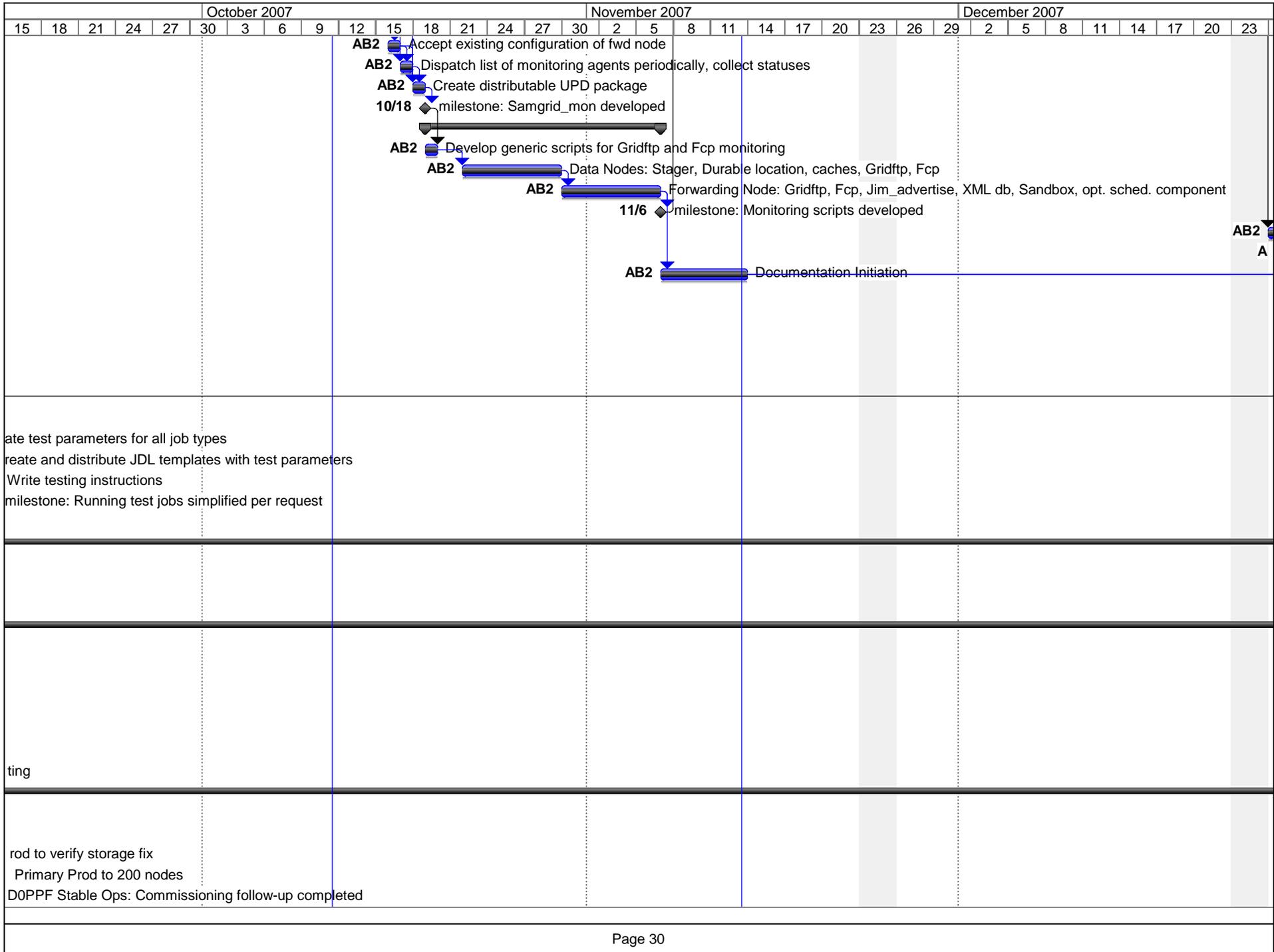


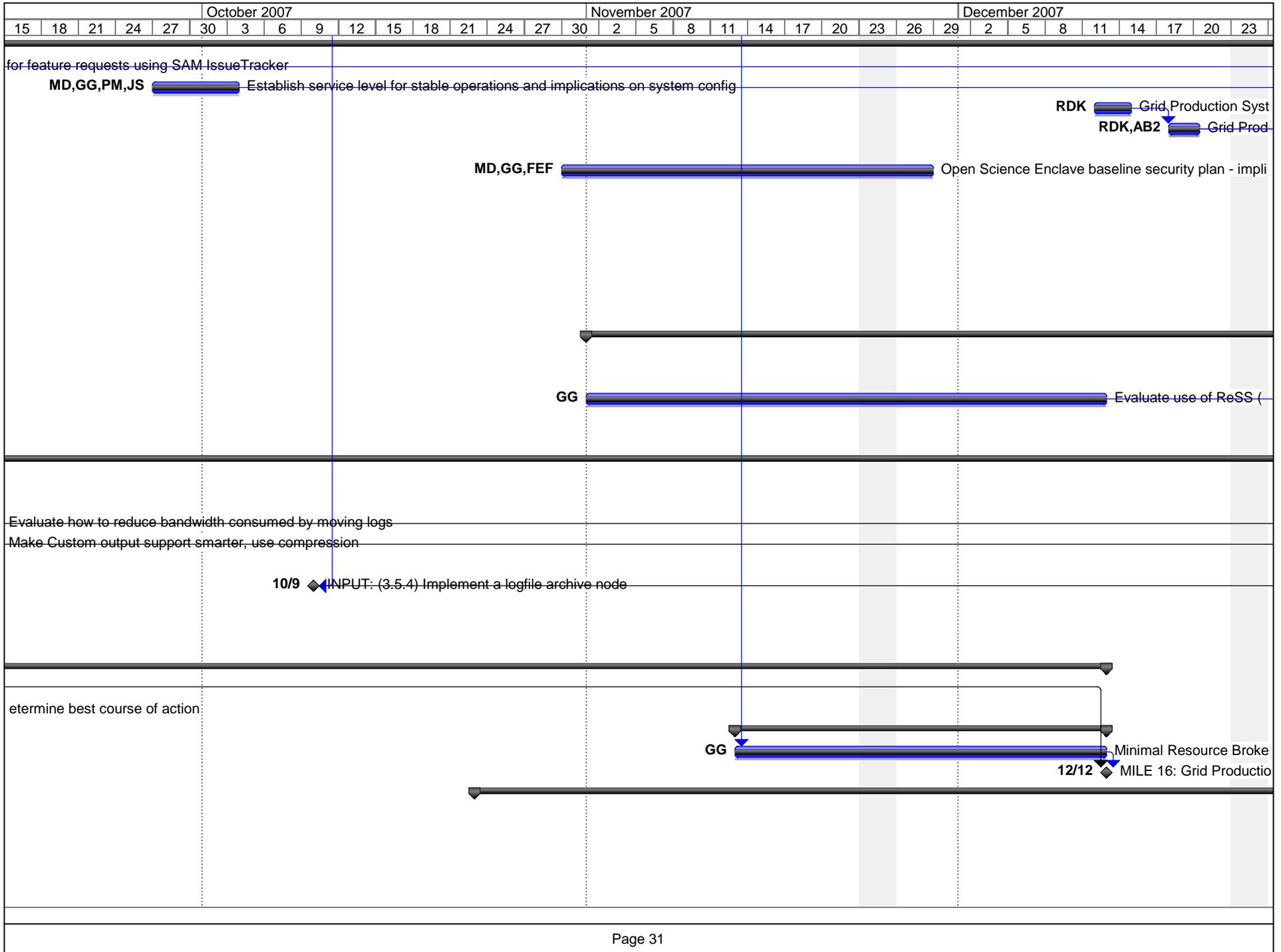


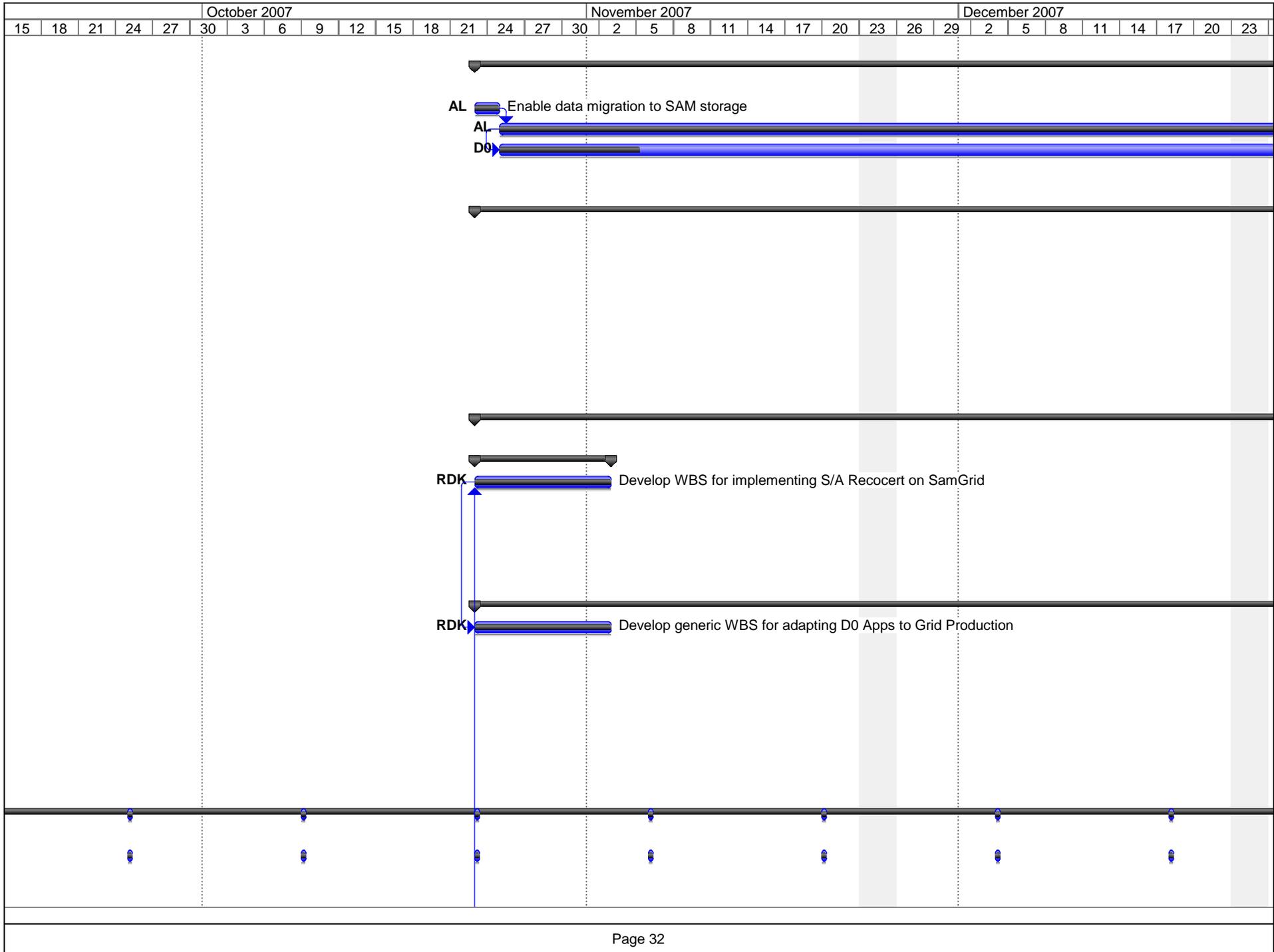


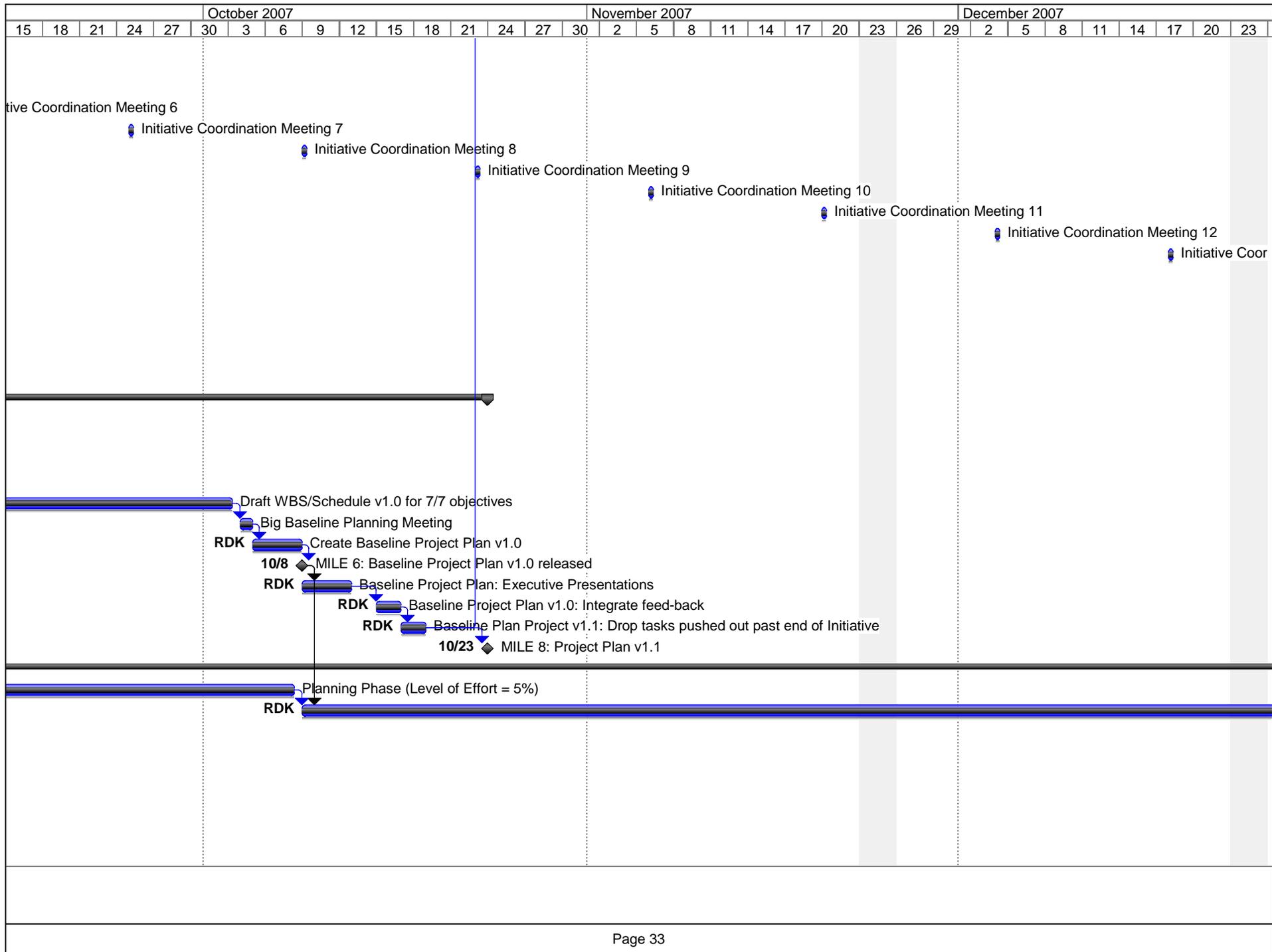


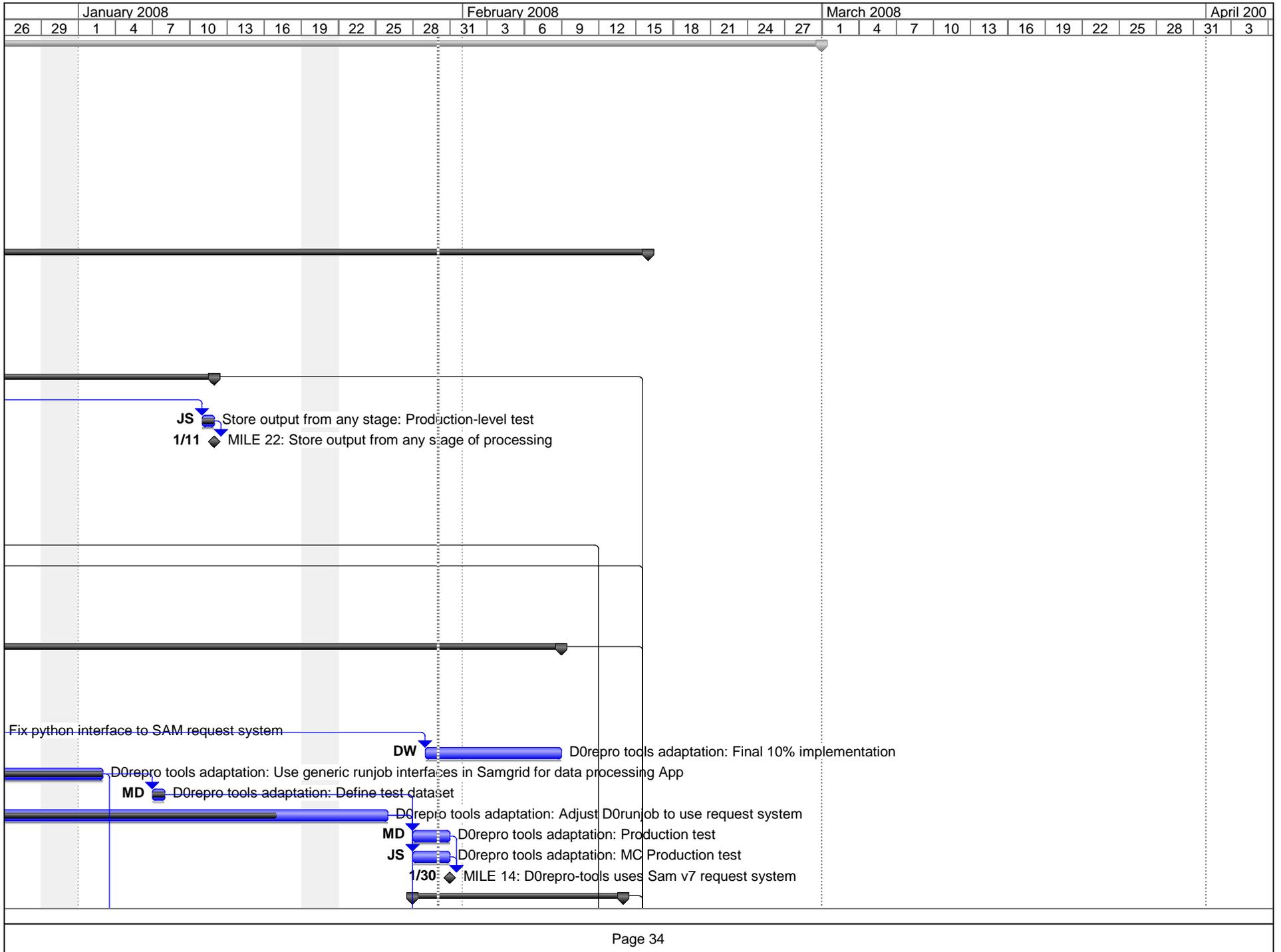


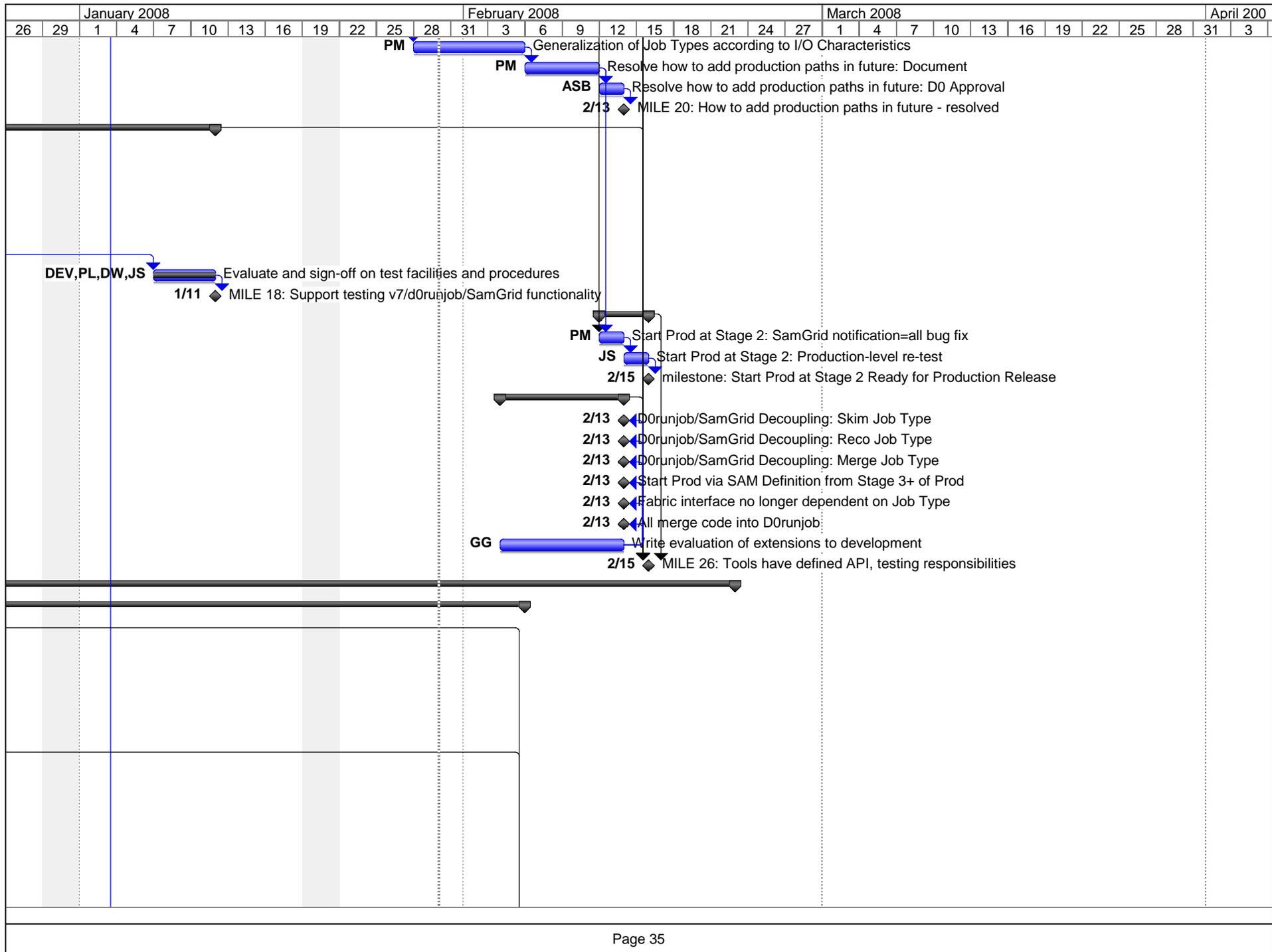


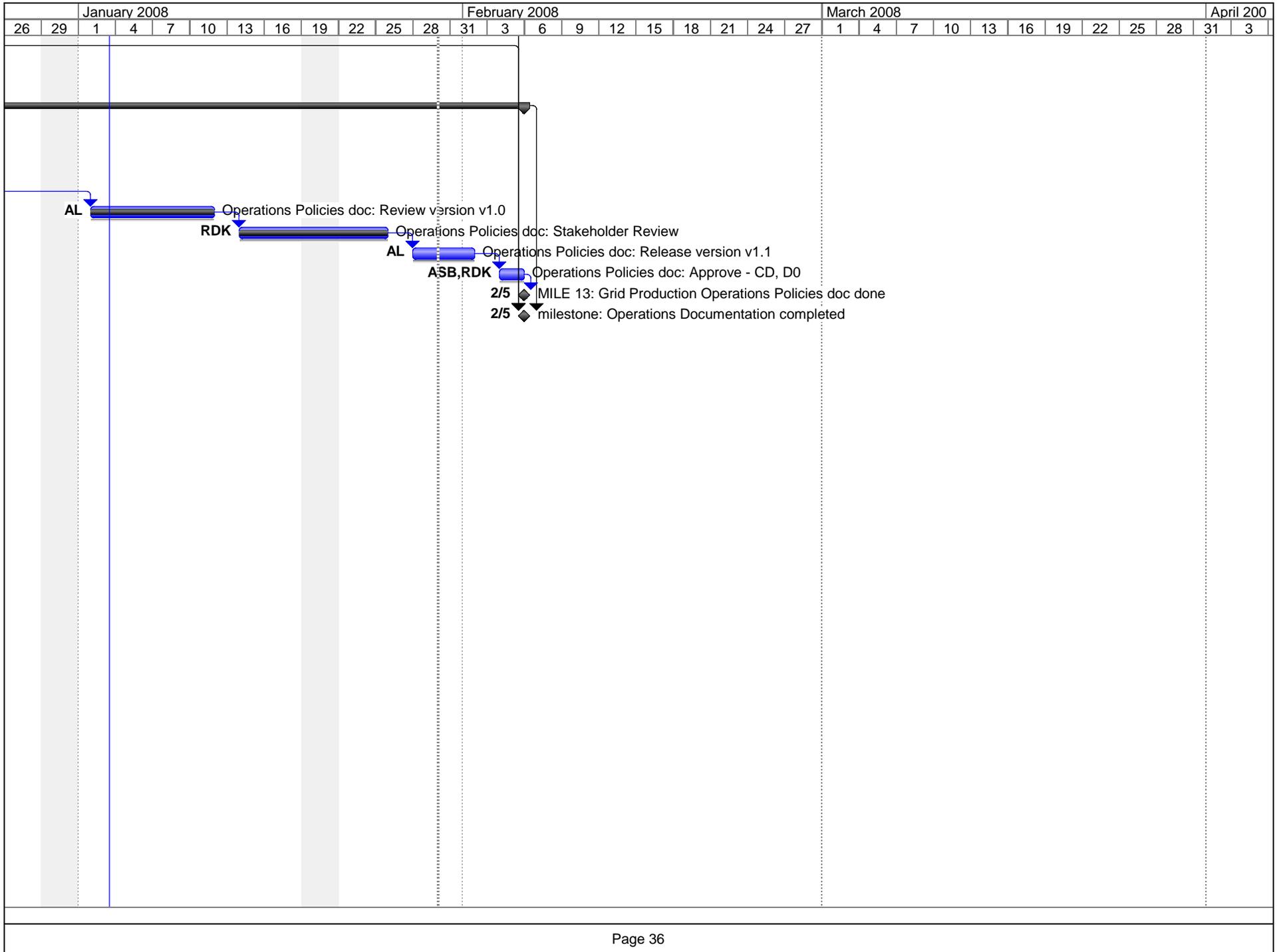




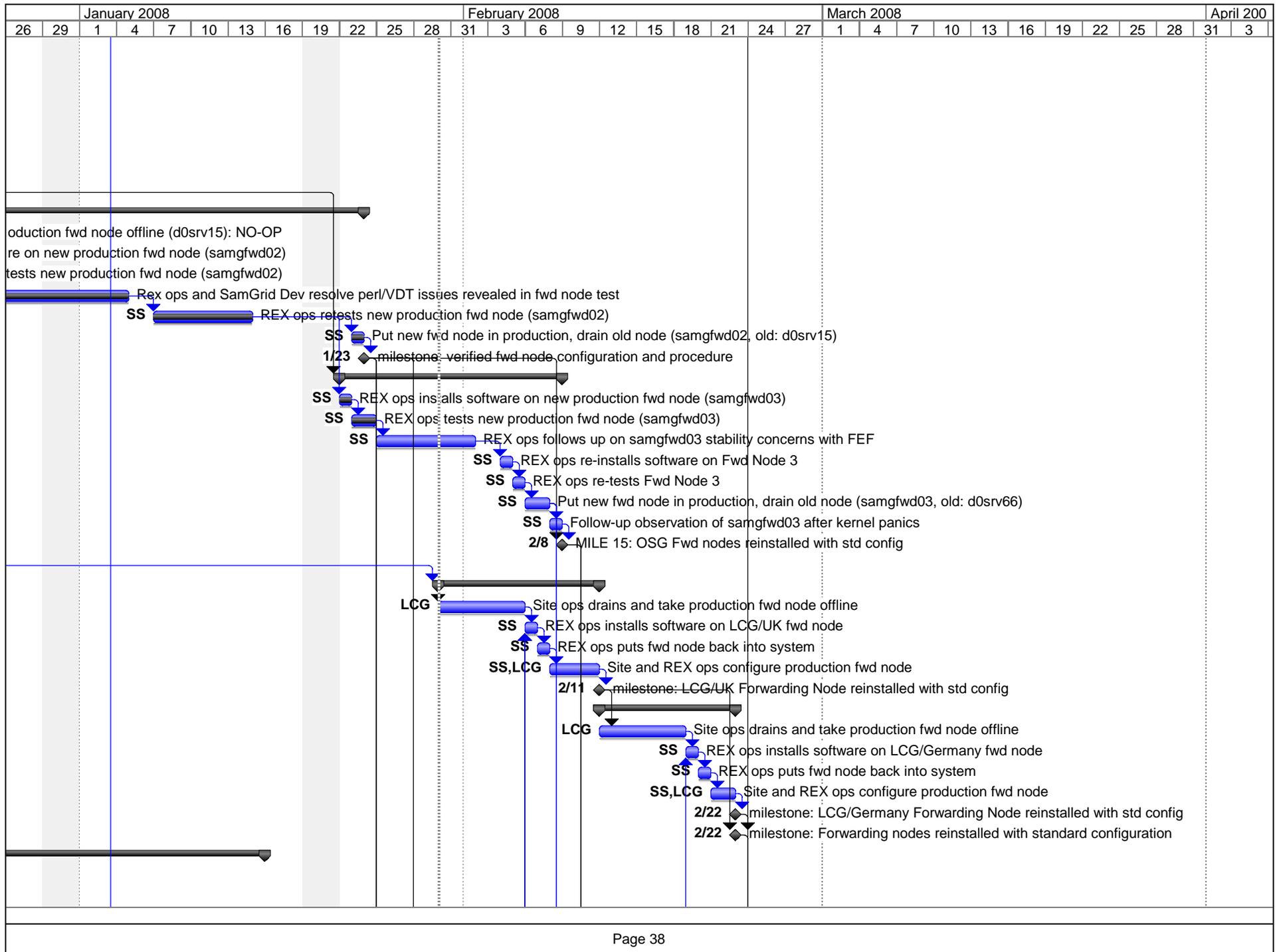


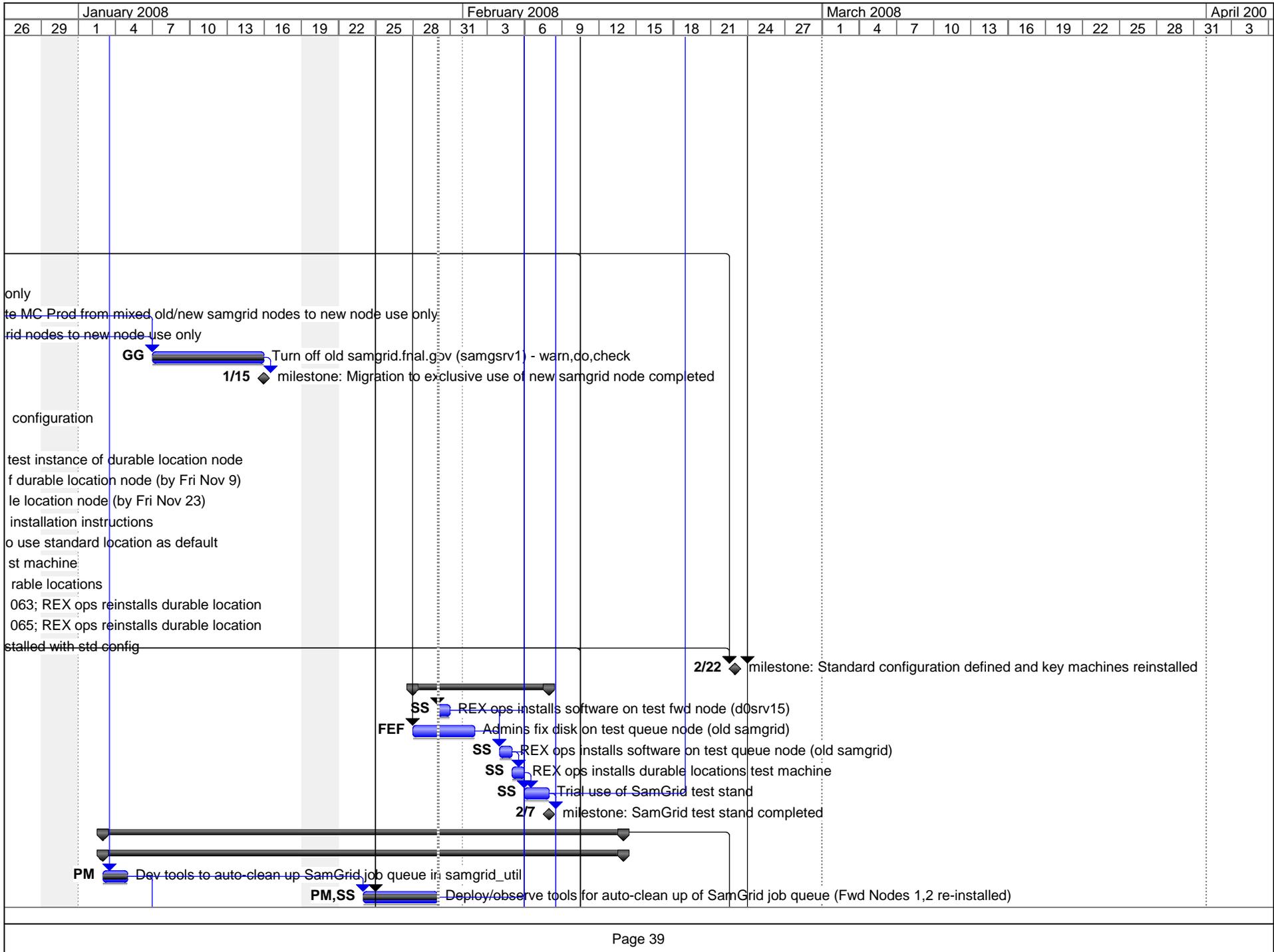


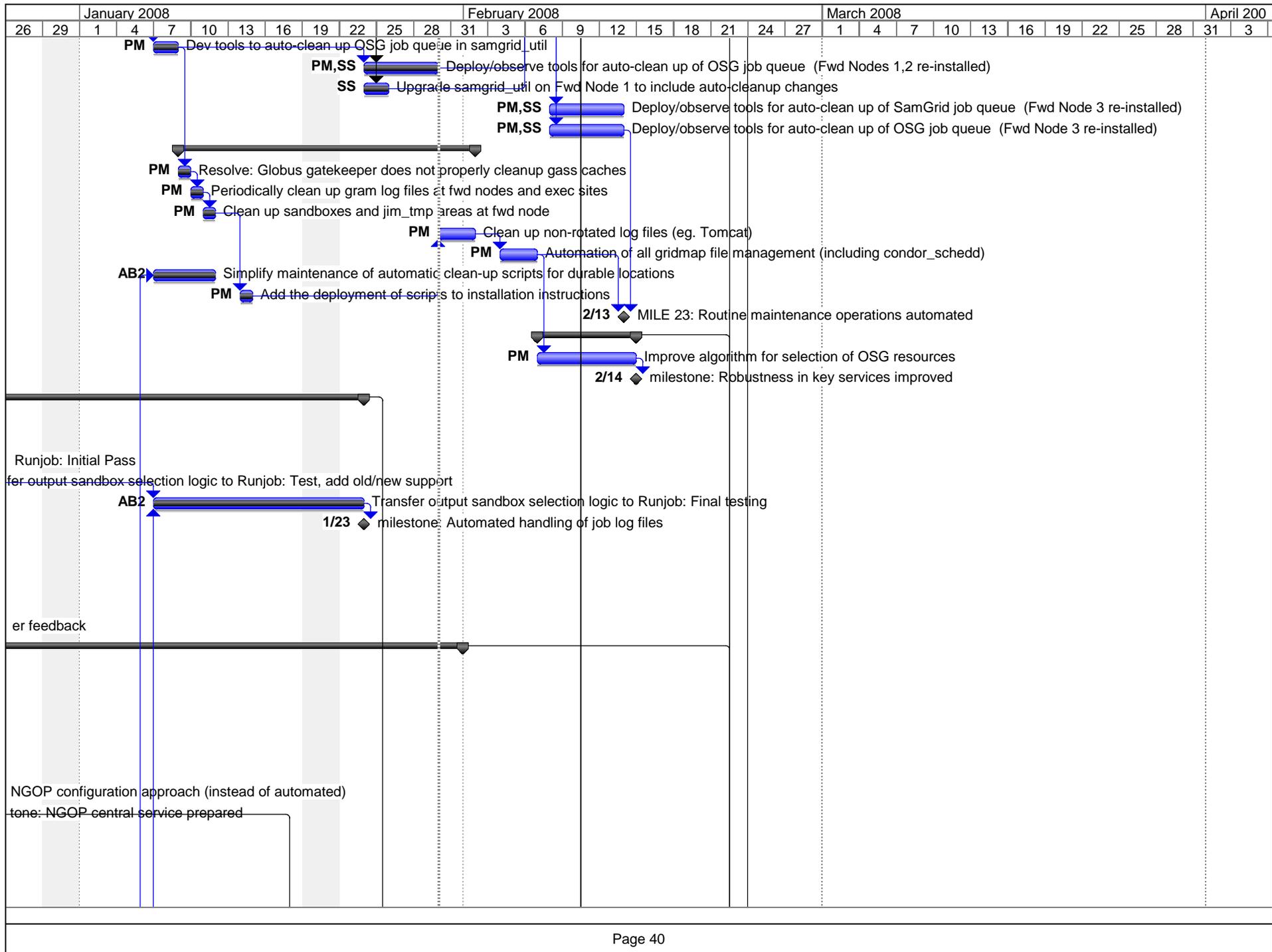


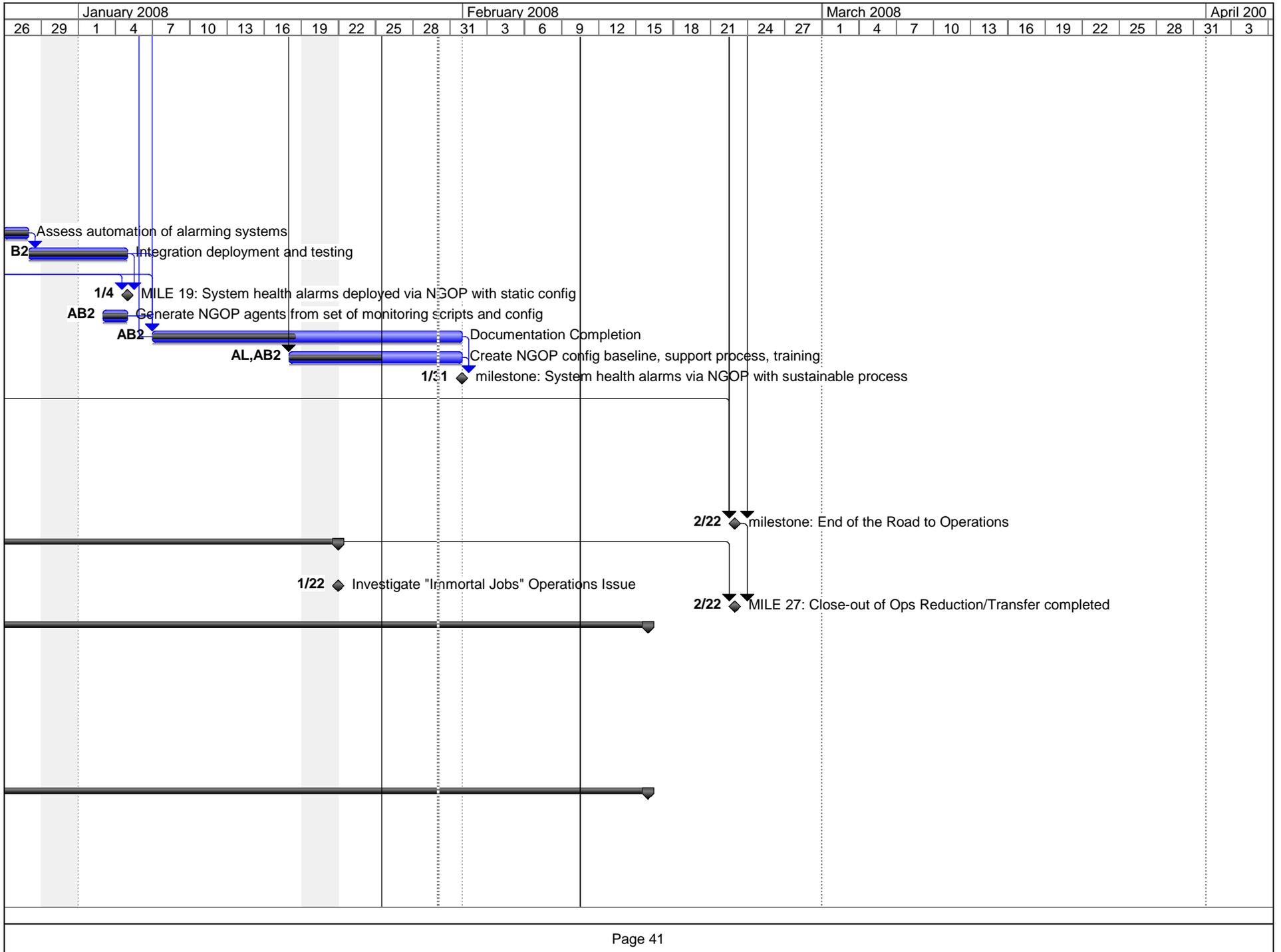


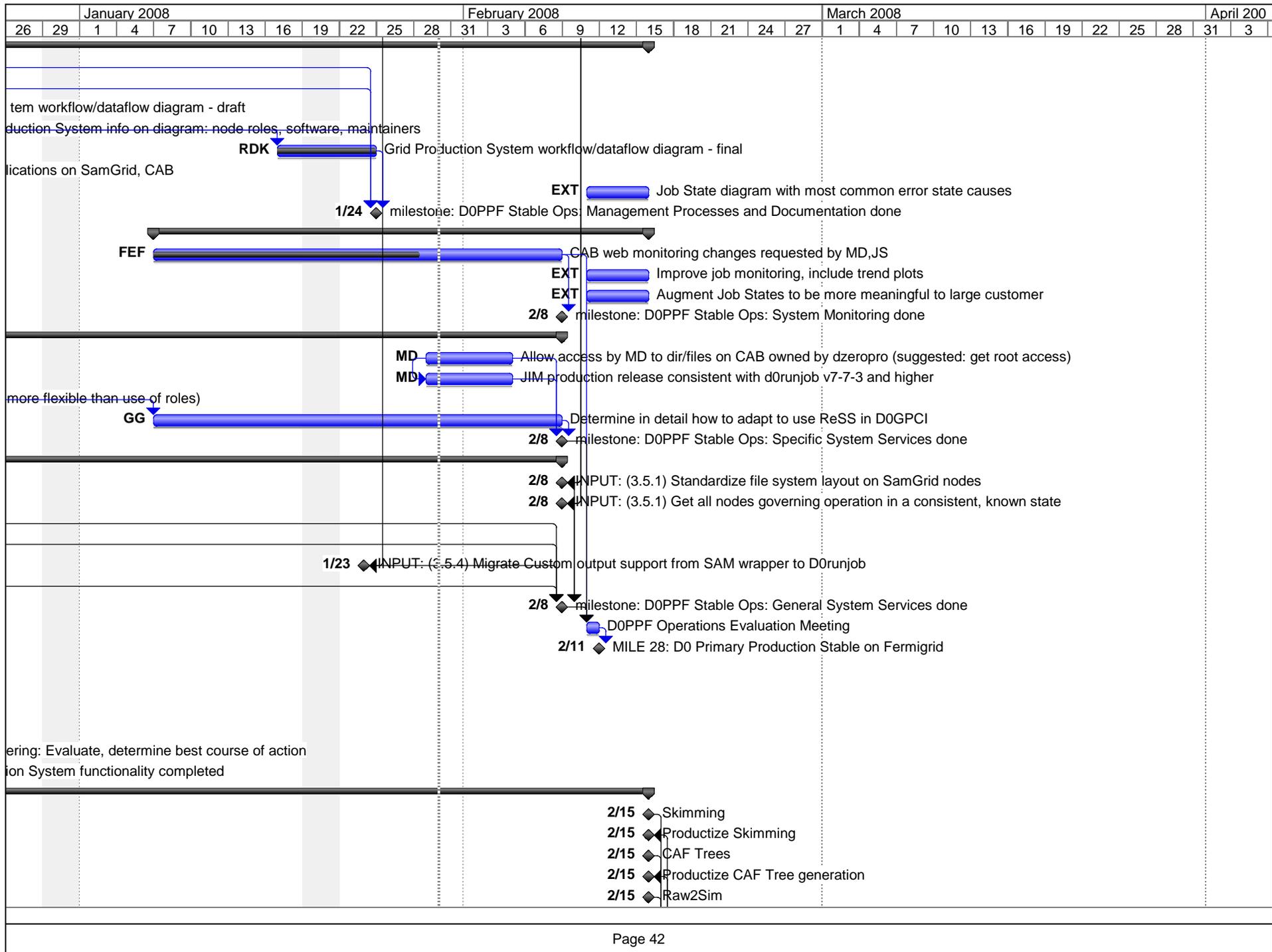
January 2008								February 2008								March 2008								April 2008									
26	29	1	4	7	10	13	16	19	22	25	28	31	3	6	9	12	15	18	21	24	27	1	4	7	10	13	16	19	22	25	28	31	3
<p>s ops tasks with SamGrid Dev (Level of Effort)</p> <p>Training and Docs as requested by REX ops (Level of Effort)</p> <p>Phase 4/4 of Ops Transfer done</p> <p>Ops Transfer nominally completed</p>																																	

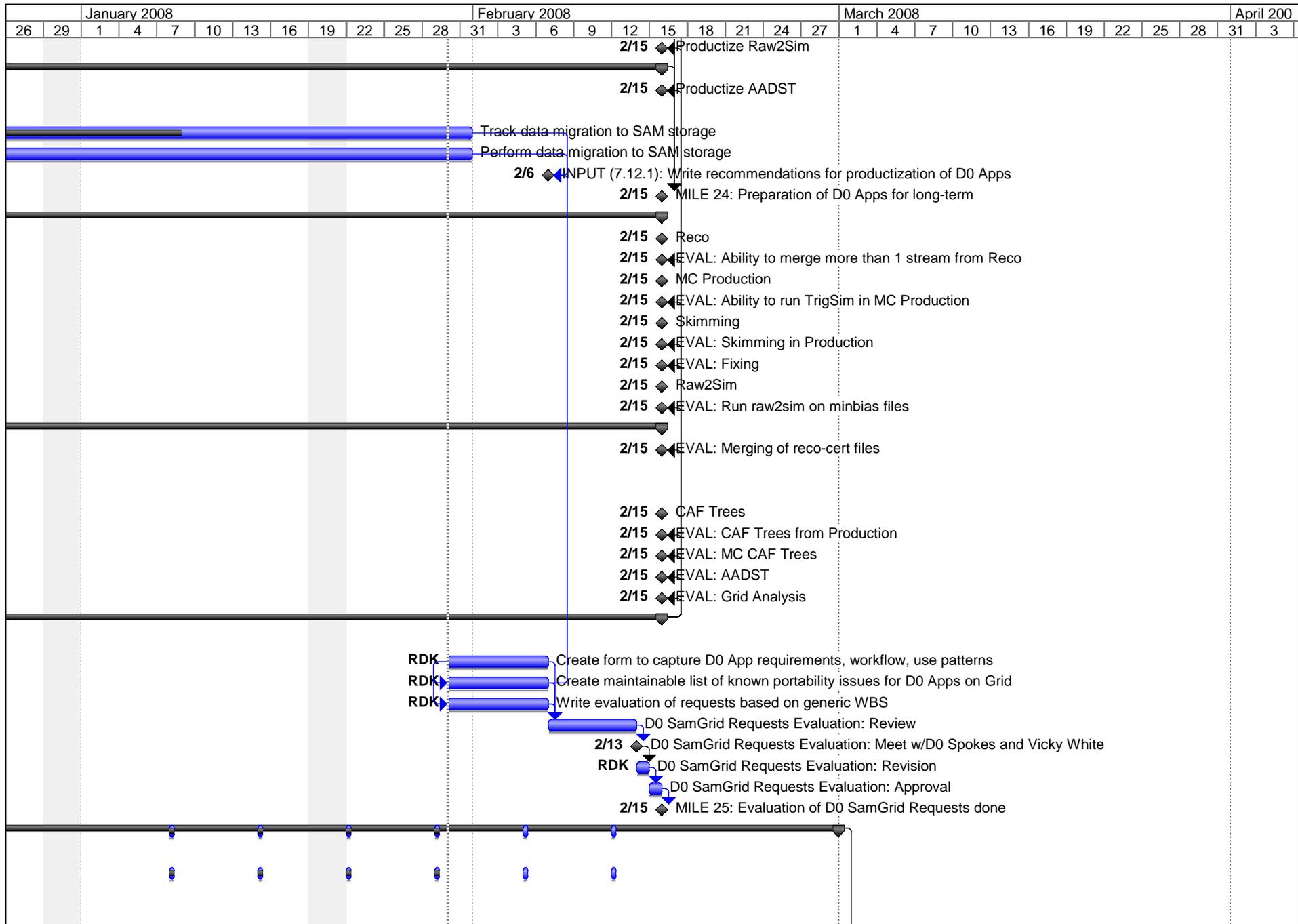


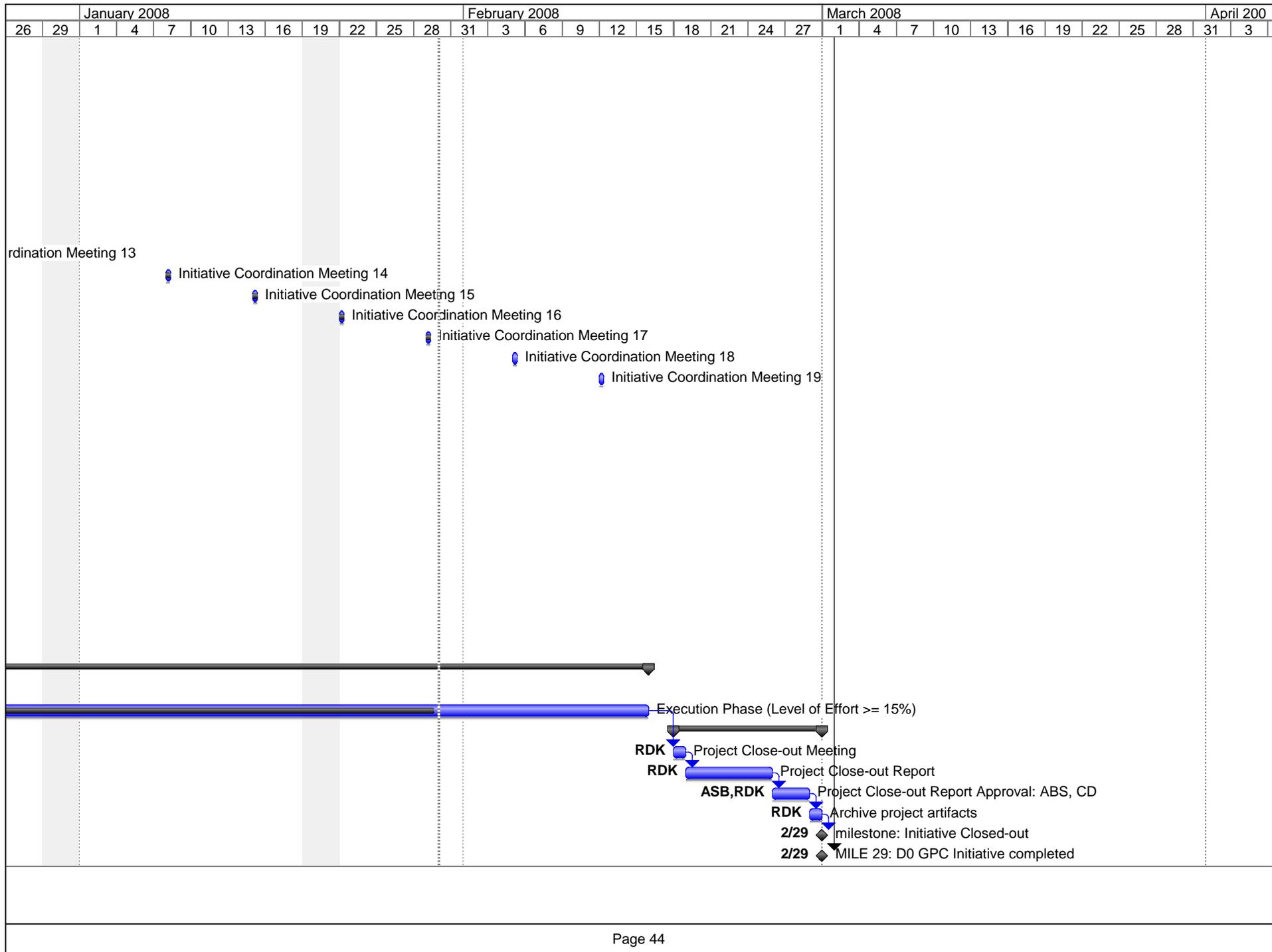












Project: D0 Grid Production Computin
Date: Wed 1/30/08

Task



Split



Progress



Milestone



Summary



Project Summary



External Tasks



External Milestone



Deadline

